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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 409

Chloroacetylaminooethyl *o*-tolyl ether:

(JACOBS and HEIDELBERGER) 1915, 21, 416

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 417

Chloroacetylaminoisopropanol:

(JACOBS and HEIDELBERGER)

1915, 21, 424

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 425

Chloroacetylaminoisopropyl *p*-nitrobenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 425

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 425

***p*-Chloroacetylaminoleucomalachite green:**

(JACOBS and HEIDELBERGER)

1915, 21, 141

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 141

Chloroacetylaminomethyl anisate:

(JACOBS and HEIDELBERGER)

1915, 21, 406

***m*-Chloroacetylaminomethylbenzamide:**

(JACOBS and HEIDELBERGER)

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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 20, 694

Chloroacetylaminomethyl benzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 406

***m*-Chloroacetylaminomethylbenzoic acid:**

Diethylaminoethyl ester (JACOBS and HEIDELBERGER)

1915, 20, 693

— —, hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 20, 694

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1915, 20, 692

***m*-Chloroacetylaminomethylbenzoyl chloride:**

(JACOBS and HEIDELBERGER)

1915, 20, 693

 α -Chloroacetylamino- β -methyl- β -butanol:

(JACOBS and HEIDELBERGER)

1915, 21, 430

 γ -Chloroacetylamino- β -methyl- β -butanol:

(JACOBS and HEIDELBERGER)

1915, 21, 431

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 431

Chloroacetylaminomethyl *p*-methoxybenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 406

Chloroacetylaminomethylmethylethyl carbinol:

(JACOBS and HEIDELBERGER)

1915, 21, 430

Chloroacetylaminomethylmethylethyl carbinol—continued:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 430

 γ -Chloroacetylamino- β -pentanol:

(JACOBS and HEIDELBERGER)

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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 430

***m*-Chloroacetylaminophenol:**

(JACOBS and HEIDELBERGER)

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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 133

***o*-Chloroacetylaminophenol:**

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 131

***o*-Chloroacetylaminophenyl benzoate:**

(JACOBS and HEIDELBERGER)

1915, 21, 131

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 131

***p*-Chloroacetylaminophenyl chloroacetate:**

(JACOBS and HEIDELBERGER)

1915, 21, 134

***o*-Chloroacetylaminophenyl *p*-nitrobenzoate:**

(JACOBS and HEIDELBERGER)

1915, 21, 132

***o*-Chloroacetylaminophenyl *p*-nitrobenzoate—continued:**

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 132

 γ -Chloroacetylaminopropyl anisate:

(JACOBS and HEIDELBERGER)

1915, 21, 423

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 424

 γ -Chloroacetylaminopropyl *p*-methoxybenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 423

 γ -Chloroacetylaminopropyl *p*-nitrobenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 423

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 423

6-Chloroacetylaminquinoline:

(JACOBS and HEIDELBERGER)

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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

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***o*-Chloroacetylamino-*p'*, *p''*-tetraethyldiaminotriphenylmethane:**

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 142

***p*-Chloroacetyl-amino-*p'*, *p''*-tetraethyldiaminotriphenylmethane:**

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
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Chloroacetylaniline:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
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Chloroacetyl- ω -anilinoacetophenone:

(JACOBS and HEIDELBERGER)
1915, 21, 106

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
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Chloroacetyl-*o*-anisidine:

(JACOBS and HEIDELBERGER)
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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
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Chloroacetyl-*p*-anisidine:

(JACOBS and HEIDELBERGER)
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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
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Chloroacetyl- ω , *o*-anisidinoacetophenone:

(JACOBS and HEIDELBERGER)
1915, 21, 137

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 137

Chloroacetylbenzylamine:

(JACOBS and HEIDELBERGER)
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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 20, 686

Chloroacetylbenzylurea:

(JACOBS and HEIDELBERGER)
1915, 21, 152

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 152

Chloroacetylbis-(*p*-dimethylaminophenyl)-methylamine:

(JACOBS and HEIDELBERGER)
1915, 21, 472

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 473

Chloroacetyl-*o*-chloroaniline:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 110

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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
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Chloroacetyl-*p*-dimethylaminophenylaminoethanol:

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Chloroacetyldiphenylamine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
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Chloroacetyl-ethylaminoethanol:

(JACOBS and HEIDELBERGER)

1915, 21, 417

Chloroacetyl-ethylaminoethyl***p*-nitrobenzoate:**

(JACOBS and HEIDELBERGER)

1915, 21, 417

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 418

Chloroacetyl-leucoauramine:

(JACOBS and HEIDELBERGER)

1915, 21, 472

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 473

Chloroacetyl-methylaniline:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

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Chloroacetyl-*o*-methylbenzylamine:

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1915, 20, 686

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

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Chloroacetyl-methylurea:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

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Chloroacetyl- α -naphthylamine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 109

Chloroacetyl- β -naphthylamine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 109

Chloroacetyl-novocain

(JACOBS and HEIDELBERGER)

1915, 21, 139

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 140

Chloroacetyl-oxyethyl anisate:

(JACOBS and HEIDELBERGER)

1915, 21, 471

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 471

Chloroacetyl-phenylaminoethanol:

(JACOBS and HEIDELBERGER)

1915, 21, 418

Chloroacetyl-phenylaminoethyl *p*-nitrobenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 418

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 419

 β -Chloroacetyl- α , α -phenylbenzylhydrazine:

(JACOBS and HEIDELBERGER)

1915, 21, 474

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 475

Chloroacetylphenylglycinanilide:

(JACOBS and HEIDELBERGER)

1915, 21, 106

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 106

Chloroacetyl-*m*-toluidine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 108

Chloroacetyl-*o*-toluidine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 107

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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 108

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(JACOBS and HEIDELBERGER)

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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

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Chloroacetylurea:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 151

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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 152

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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 109

 α -Chlorobenzalhydantoin

(WHEELER, HOFI and JOHNSON)

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***o*-Chlorobenzoic acid:**

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1907, 3

***o*-Chlorobenzyl chloride:**

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 20

***p*-Chlorobenzyl chloride:**

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 20

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Hexamethylenetetramin-
ium salt (JACOBS and
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COBS and HEIDELBER-
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Hexamethylenetetramin-
ium salt (JACOBS and
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1915, 20, 681

**5-Chloromethylsalicylalde-
hyde:**

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)

1915, 20, 683

Chloromethylsalicylic acid:

Hexamethylenetetramin-
ium salt (JACOBS and
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1915, 20, 681

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ylenetetraminium salt
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1915, 20, 681

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Hexamethylenetetramin-
ium salt (JACOBS and
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 γ -Chloropropyl bromide:

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ium salt (JACOBS and
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1911
- Gum:**
Invertase conte
LEWIS and GL
1911
- H**
- Hair:**
Amino-acid c
(VAN SLYKE
1911-
- Chemical com
different rac
BERFORD and
1911
- Halogen:**
Tissue enzyme
celerator of ()
1911
- Handkäse:**
Indole content
1911
- Heart:**
Growth, influen
ing on (McC
DAVIS) 1911

Heart—continued:

Isolated mammalian, action of blood proteins on (GORHAM and MORRISON)

1909–10, 7, xviii

Muscle, lipoid content (ROSENBLOOM)

1913, 14, 291

— plasma, guanylic acid, action on (LEVENE and MEDIGRECEANU)

1911, 9, 68

— —, inosin, action on (LEVENE and MEDIGRECEANU)

1911, 9, 67

— —, inosinic acid, action on (LEVENE and MEDIGRECEANU)

1911, 9, 68

— —, pyrimidine nucleotide, action on (LEVENE and MEDIGRECEANU)

1911, 9, 398

— —, thymus nucleic acid, action on (LEVENE and MEDIGRECEANU)

1911, 9, 402

— —, yeast nucleic acid, action on (LEVENE and MEDIGRECEANU)

1911, 9, 69, 400

Tissue, urea content (MARSHALL and DAVIS)

1914, 18, 60

Heart:

Arabinose, effect on (HENDERSON)

1911–12, 10, 6

Bence-Jones protein, reaction of (TAYLOR and MILLER)

1916, 25, 282

Glucose, effect on (HENDERSON)

1911–12, 10, 3

Heat—continued:

Muscle, effect on (MEIGS)

1909, 6, xviii

Pancreas powder, effect on activity of (LOEVENHART)

1906–07, 2, 451

Peroxidase activity of milk, influence on (KASTLE and PORCH)

1908, 4, 311

Phytase, destruction by (ANDERSON)

1915, 20, 490

Reductase, action on (HARRIS and CREIGHTON)

1915, 21, 303

Yeast enzyme, effect on (KOELKER)

1910–11, 8, 169

Heat production:

Alanine, effect of (LUSK)

1915, 20, 560

Athletes (BENEDICT and SMITH)

1915, 20, 246

Body composition and (BENEDICT)

1915, 20, 279

— surface and (BENEDICT)

1915, 20, 274

— weight and (BENEDICT)

1915, 20, 270

Carbohydrate conversion into fat (LUSK)

1915, 20, 581

Depancreatized dog (MURLIN and KRAMER)

1913, 15, 380

Diabetes mellitus (LUSK)

1915, 20, 600

Glucose and alanine, effect of (LUSK)

1915, 20, 584

—, effect of (LUSK)

1915, 20, 575

Heat production—continued:

Glucose and glycoll, effect of (LUSK)

1915, 20, 584

Glycoll, and alanine, effect of (LUSK)

1915, 20, 560

—, effect of (LUSK)

1915, 20, 560

Hydrazine, effect of (UNDERHILL and MURLIN)

1915, 22, 499

Menstruation, effect of (LUSK)

1915, 20, 562

Non-vegetarians (BENEDICT and ROTH)

1915, 20, 233

Normal individuals (BENEDICT and EMMES)

1915, 20, 253

Vegetarians (BENEDICT and ROTH)

1915, 20, 233

Heat of reaction:

Direct determination (HENDERSON and RYDER)

1907, 3, xvii

Hemagglutinin:

Autolysis and (SCHNEIDER)

1912, 11, 53

Beans, hemagglutinating properties of (SCHNEIDER)

1912, 11, 47

Food for seedlings (SCHNEIDER)

1912, 11, 55

Hemocyanin:

Amino-acids of (VAN SLYKE)

1911-12, 10, 50

Amino nitrogen content (VAN SLYKE and BIRCHARD)

1913-14, 16, 544

Hemocyanin—continued:

Coagulation temperature (ALSBERG)

1914, 19, 81

Limulus polyphemus (ALSBERG and CLARK)

1910-11, 8, 1

(ALSBERG)

1914, 19, 77

— —, oxygen, solubility of, in solutions of (ALSBERG and CLARK)

1914, 19, 503

— —, potassium oxalate, action of (ALSBERG)

1915, 23, 501

Hemoglobin:

Amino-acids of (VAN SLYKE)

1911-12, 10, 52

Amino nitrogen of (VAN SLYKE and BIRCHARD)

1913-14, 16, 543

Blood content, dextrose, action of, on (FISHER and WISHART)

1912-13, 13, 58

— —, oxygen, influence of, on (KOLLS and LOEVENHART)

1914, 17, xxviii

Liver enzymes, digestion by (BRADLEY and TAYLOR)

1916, 25, 27

Muscle, non-striated, content of (SAIKI)

1908, 4, 48

Specificity (BRADLEY and SANSUM)

1914, 17, xxvii

1914, 18, 49

Tissue reductase, reduction by (HARRIS and CREIGHTON)

1915, 20, 17

Hemoglobin—continued:

Trypsin, action of (HOLLIS)

1908, 4, xxxiii

Hemolysin:

Amanita phalloides, glucoside nature of (ABEL and FORD)

1906-07, 2, 273

Hemolysis:

Analytical methods applied to (MANWARING)

1905-06, 1, 213

Fatty acids, power of (McPHERDAN)

1912, 11, x

Hemolytic serum:

See Serum.

Hemorrhage:

Amino-acid content of blood, influence on (GYÖRGY and ZUNZ)

1915, 21, 518

Blood composition after repeated (TAYLOR and LEWIS)

1915, 22, 71

Hyperglycemia following (EPSTEIN and BAEHR)

1914, 18, 21

Protein metabolism, influence on (TAYLOR and LEWIS)

1915, 22, 71

Recuperation from, protein, effect of (FOSTER)

1909, 6, xlviii;

1909-10, 7, 379

Emp seed:

Amino-acid content (NOLLAU)

1915, 21, 614

Eptoses:

(PEIRCE)

1914, 17, xxxv;

1915, 23, 327

Heptylic acid:

Glucose formation from (RINGER)

1913, 14, 43

Oxidation in the body (RINGER)

1913, 14, 47

— with hydrogen peroxide (DAKIN)

1908, 4, 229

Herbivora:

Acidosis in (HART and NELSON)

1914, 17, xlv

(STEENBOCK, NELSON, and HART)

1914, 19, 399

Herter, Christian A.:

Appreciation,

1910-11, 8, 437

Memorial fund,

1911-12, 10, 1

Heteroalbumose:

Amino nitrogen content (VAN SLYKE)

1911, 9, 194

(VAN SLYKE and BIRCHARD)

1913-14, 16, 544

Fibrin (LEVENE, VAN SLYKE, and BIRCHARD)

1910-11, 8, 269

Witte's peptone, hydrolysis of (LEVENE)

1905-06, 1, 54

— —, preparation of (LEVENE)

1905-06, 1, 46

Hexacosane:

Preparation (LEVENE, WEST, and VAN DER SCHEER)

1915, 20, 528

Hexadecane:

Preparation (LEVENE, WEST, and VAN DER SCHEER)

1915, 20, 523

Hexamethyleneamine:

See Hexamethylenetetramine:

Hexamethylenetetramine:

Bile, excretion in (CROWE)

1908, 4, xxxv

Determination, colorimetric (COLLINS and HANZLIK)

1916, 25, 231

Excretion (McGUIGAN)

1912, 11, xxxiii

Pancreatic juice, excretion in (CROWE)

1908, 4, xxxv

Salts of (JACOBS and HEIDELBERGER)

1915, 20, 659, 685;

1915, 21, 103, 145,

403, 439, 455, 465

Hexamethylenetetraminium

salts:¹

o-Acetaminobenzyl chloride, 1915, 20, 668

p-Acetaminobenzyl chloride, 1915, 20, 668

1-Acetamino-4-ethoxychloroacetylbenzylamine, 1915, 20, 691

p-Acetaminoiodoacetylbenzylamine, 1915, 20, 687

3-Acetamino-4-methylphenacyl bromide, 1915, 21, 461

p-Acetaminophenacyl bromide, 1915, 21, 460

o-Acetaminophenoxyethyl bromide, 1915, 21, 446

p-Acetaminophenoxyethyl bromide, 1915, 21, 448

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetramine salts—continued:

3-Acetamino-4-tolyl doethyl ketone, 1915, 21

β -Acetoxy- α -chloroacetyl naphthobenzylamine, 1915, 20

2-Acetoxy-3,5-dibromobenzyl bromide, 1915, 20

4-Acetoxy-3,5-dibromobenzyl bromide, 1915, 20

2-Acetoxy-3,5-dimethylbenzyl chloride, 1915, 20

2-Acetoxy-3,5-dimethyl-4,6-dibromobenzylamide, 1915, 20

Acetoxyethyl bromide, 1915, 2

β -Acetoxy- α -iodoacetyl naphthobenzylamine, 1915, 2

β -Acetyl- α -chloroacetyl phenylhydrazine, 1915, 2

3-Aldehyde-4-oxybenzyl chloride, 1915, 2

Aliphatic-aromatic tones, ω -halogenatives, 1915, 2

Amines, monoacylated aromatic, 1915, 2

—, — simple, 1915, 2

Aminoalcohols, monoacetyl derivatives, 1915, 2

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminiumsalts¹—*continued*:

- p*-Aminophenacyl chloride,
1915, 21, 460
- p*-Aminophenyl chloro-
methyl ketone,
1915, 21, 460
- p*-Anisyl bromomethyl ke-
tone,
1915, 21, 462
- Benzeneazo-*m*-chloroace-
tylaminophenol,
1915, 21, 134
- Benzoyloxyethyl bromide,
1915, 21, 450
- Benzyl halides,
1915, 20, 659
- Bornyl bromoacetate,
1915, 21, 468
- ω -Bromoacetophenoneox-
ime,
1915, 21, 456
- Bromoacetylaniline,
1915, 21, 104
- β -(ω -Bromoacetyl)-quinal-
dine,
1915, 21, 464
- Bromoacetyl- ω -*o*-toluidi-
noacetophenone,
1915, 21, 107
- o*-Bromobenzyl chloride,
1915, 20, 665
- p*-Bromobenzyl chloride,
1915, 20, 665
- p*-Bromochloroacetylani-
line,
1915, 21, 110
- Bromoethyl acetate,
1915, 21, 449
- benzoate,
1915, 21, 450
- esters,
1915, 21, 449
- ethers,
1915, 21, 440

¹All of these salts were prepared
by JACOBS and HEIDELBERGER.**Hexamethylenetetraminium**salts¹—*continued*:

- Bromoethyl *p*-nitroben-
zoate, 1915, 21, 450
- ω -Bromo-*m*-nitroaceto-
phenone,
1915, 21, 459
- p*-Bromophenoxyethyl
bromide,
1915, 21, 444
- m*-Carbethoxychloroace-
tylbenzylamine,
1915, 20, 692
- 3-Carbomethoxy-4-oxy-
benzyl chloride,
1915, 20, 681
- 3-Carboxy-4-oxybenzyl
chloride,
1915, 20, 681
- Cetyl iodide,
1915, 21, 466
- Chloroacetdiethylamide,
1915, 21, 149
- Chloroacetdimethylamide,
1915, 21, 148
- Chloroacetethylamide,
1915, 21, 149
- Chloroacetmethylamide,
1915, 21, 148
- Chloroacetyl-piperidide,
1915, 21, 150
- m*-Chloroacetylaminooce-
tophenone,
1915, 21, 141
- ω -Chloroacetylaminooce-
tophenone,
1915, 21, 472
- p*-Chloroacetylaminoozo-
benzene,
1915, 21, 118
- Chloroacetylaminoozotol-
uene, 1915, 21, 118
- p*-Chloroacetylaminoben-
zeneazodiethylaniline,
1915, 21, 124

¹All of these salts were prepared
by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

- p*-Chloroacetylaminobenzeneazodimethylaniline, 1915, 21, 123
- p*-Chloroacetylaminobenzeneazodipropylaniline, 1915, 21, 125
- p*-Chloroacetylaminobenzeneazoethylbenzylaniline, 1915, 21, 127
- p*-Chloroacetylaminobenzoic acid, diethylaminoethyl ester, 1915, 21, 140
- —, ethyl ester, 1915, 21, 139
- o*-Chloroacetylaminobenzyl alcohol, 1915, 21, 138
- o*-Chloroacetylaminobenzyl benzoate, 1915, 21, 139
- β -Chloroacetylaminog γ -butanol, 1915, 21, 429
- δ -Chloroacetylaminog γ -butanol, 1915, 21, 427
- β -Chloroacetylaminog γ -butyl *p*-nitrobenzoate, 1915, 21, 429
- δ -Chloroacetylaminobutyl *p*-nitrobenzoate, 1915, 21, 428
- p*-Chloroacetylaminodiethylaniline, 1915, 21, 115
- m*-Chloroacetylaminodimethylaniline, 1915, 21, 113
- p*-Chloroacetylaminodimethylaniline, 1915, 21, 114

¹ All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

- p*-Chloroacetylaminodipropylaniline, 1915, 21, 1
- Chloroacetylaminoethyl acetylsalicylate, 1915, 21, 4
- anisate, 1915, 21, 4
- (*p*-azodiethylaniline) benzoate, 1915, 21, 4
- benzoate, 1915, 21, 4
- ethyl ether, 1915, 21, 4
- *p*-methoxybenzoate, 1915, 21, 4
- β -naphthoate, 1915, 21, 4
- *m*-nitrobenzoate, 1915, 21, 4
- *o*-nitrobenzoate, 1915, 21, 4
- *p*-nitrobenzoate, 1915, 21, 4
- *o*-toluate, 1915, 21, 4
- *o*-tolyl ether, 1915, 21, 4
- p*-Chloroacetylaminodimethylaniline, 1915, 21, 115
- Chloroacetylaminoisopropyl *p*-nitrobenzoate, 1915, 21, 4
- p*-Chloroacetylaminoleucomalachite green, 1915, 21, 1

¹ All of these salts were prepared by JACOBS and HEIDELBERGER.

examethylenetetraminium salts—continued:

- m*-Chloroacetylaminomethylbenzamide,
1915, 20, 694
- m*-Chloroacetylaminomethylbenzoic acid, diethylaminoethyl ester,
1915, 20, 694
- —, ethyl ester,
1915, 20, 692
- γ -Chloroacetylaminob-methyl- β -butanol,
1915, 21, 431
- Chloroacetylaminomethylmethylethyl carbinol,
1915, 21, 430
- γ -Chloroacetylaminob-pentanol,
1915, 21, 430
- m*-Chloroacetylaminophenol,
1915, 21, 133
- o*-Chloroacetylaminophenol,
1915, 21, 131
- o*-Chloroacetylaminophenyl benzoate,
1915, 21, 131
- *p*-nitrobenzoate,
1915, 21, 132
- γ -Chloroacetylaminopropyl anisate,
1915, 21, 424
- *p*-nitrobenzoate,
1915, 21, 423
- 6-Chloroacetylaminiquinoline,
1915, 21, 143
- o*-Chloroacetylaminob-*p',p'*-tetraethyldiaminotriphenylmethane,
1915, 21, 142
- p*-Chloroacetylaminob-*p',p'*-tetraethyldiaminotriphenylmethane,
1915, 21, 142

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts—continued:

- Chloroacetylaniline,
1915, 21, 104
- Chloroacetyl- ω -anilinoacetophenone,
1915, 21, 107
- Chloroacetyl-*o*-anisidine,
1915, 21, 135
- Chloroacetyl-*p*-anisidine,
1915, 21, 138
- Chloroacetyl- ω -*o*-anisidinoacetophenone,
1915, 21, 137
- Chloroacetylbenzylamine,
1915, 20, 686
- Chloroacetylbenzylurea,
1915, 21, 152
- Chloroacetyl-*o*-chloroaniline,
1915, 21, 110
- Chloroacetyl- ψ -cumidine,
1915, 21, 109
- Chloroacetyldiphenylamine,
1915, 21, 105
- Chloroacetylethylaminob-ethyl *p*-nitrobenzoate,
1915, 21, 418
- Chloroacetylleucoauramine,
1915, 21, 473
- Chloroacetylmethylaniline,
1915, 21, 105
- Chloroacetyl-*o*-methylbenzylamine,
1915, 20, 686
- Chloroacetylmethylurea,
1915, 21, 151
- Chloroacetyl- α -naphthylamine,
1915, 21, 109
- Chloroacetyl- β -naphthylamine,
1915, 21, 109

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

- Chloroacetyl novocain,
1915, 21, 140
- Chloroacetyloxyethyl anisate,
1915, 21, 471
- Chloroacetylphenylaminoethyl *p*-nitrobenzoate,
1915, 21, 419
- β -Chloroacetyl- α - α -phenylbenzylhydrazine,
1915, 21, 475
- Chloroacetylphenylglycinanilide,
1915, 21, 106
- Chloroacetyl-*m*-toluidine,
1915, 21, 108
- Chloroacetyl-*o*-toluidine,
1915, 21, 107
- Chloroacetyl-*p*-toluidine,
1915, 21, 108
- Chloroacetyltriphenylamine,
1915, 21, 474
- Chloroacetylurea,
1915, 21, 151
- Chloroacetylurethane,
1915, 21, 152
- Chloroacetyl-*m*-4-xylidine,
1915, 21, 109
- o*-Chlorobenzyl chloride,
1915, 20, 665
- p*-Chlorobenzyl chloride,
1915, 20, 665
- Chloromethylanisic acid,
1915, 20, 682
- —, methyl ester,
1915, 20, 683
- Chloromethyl-*p*-cresotinic acid,
1915, 20, 681
- 5-Chloromethylsalicylaldehyde,
1915, 20, 683

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

- Chloromethylsalicylic acid,
1915, 20, 681
- —, methyl ester,
1915, 20, 681
- Chloromethylvanillin,
1915, 20, 683
- o*-Cresoxyethyl bromide,
1915, 21, 440
- o*-Cyanobenzyl chloride,
1915, 20, 666
- p*-Cyanobenzyl chloride,
1915, 20, 666
- 1, 2-Diacetoxychloroacetylbenzylamine,
1915, 20, 692
- 2,3-Dimethoxybenzyl chloride,
1915, 20, 678
- 3,4-Dimethoxybenzyl chloride,
1915, 20, 678
- 1, 2-Dimethoxychloroacetylbenzylamine,
1915, 20, 692
- 3,5-Dimethylbenzyl chloride,
1915, 20, 663
- 2,4-Dinitrobenzyl chloride,
1915, 20, 667
- α , β -Diphenylchloroacetyl-aminoethanol,
1915, 21, 434
- Esters, halogenethyl,
1915, 21, 434
- Ethers, halogenethyl,
1915, 21, 434
- o*-Ethoxybenzyl chloride,
1915, 20, 677
- p*-Ethoxyphenacyl bromide,
1915, 21, 464
- p*-Ethylphenacyl bromide,
1915, 21, 454

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

examethylenetetraminium**salts¹—continued:**Halogenacetyl benzyl
amines,

1915, 20, 685

Iodoacetylaminioethanol,
1915, 21, 408*o*-Iodobenzyl bromide,
1915, 21, 467*p*-Iodobenzyl bromide,
1915, 20, 665*m*-Iodochloroacetylani-
line, 1915, 21, 1115-Iodochloroacetyl-*o*-tolu-
idine, 1915, 21, 112Iodoethyl alcohol,
1915, 21, 465 β -Iodopropionamide,
1915, 21, 147 β -Iodopropionic acid, ethyl
ester, 1915, 21, 467 β -Iodopropionyl-*o*-anisi-
dine, 1915, 21, 136 α,β -Isodiphenylchloroace-
tylaminioethanol,
1915, 21, 435Ketones, aliphatic-aromat-
ic, ω -halogen deriva-
tives, 1915, 21, 455Menthyl bromoacetate,
1915, 21, 468Mesitylene chloride,
1915, 20, 664*o*-Methoxybenzyl chloride,
1915, 20, 673*p*-Methoxybenzyl chloride,
1915, 20, 6732-Methoxy-5-carbometh-
oxybenzyl chloride,
1915, 20, 683¹All of these salts were prepared
by JACOBS and HEIDELBERGER.**Hexamethylenetetraminium****salts¹—continued:**2-Methoxy-5-carboxyben-
zyl bromide,
1915, 20, 682 β -Methoxy- α -chloroacetyl-
naphthobenzylamine,
1915, 20, 6903-Methoxy-4-ethoxyben-
zyl chloride,
1915, 20, 680 β -Methoxy- α -naphthoben-
zyl chloride,
1915, 20, 6742-Methoxy-5-nitrobenzyl
chloride, 1915, 20, 676*p*-Methoxyphenacyl bro-
mide, 1915, 21, 4621-Methyl-4-acetamino-
chloroacetylbenzylam-
ine, 1915, 20, 688*m*-Methylbenzyl chloride,
1915, 20, 663*o*-Methylbenzyl chloride,
1915, 20, 663*p*-Methylbenzyl chloride,
1915, 20, 6633,4-Methylenedioxybenzyl
chloride, 1915, 20, 677*p*-Methylphenacyl bro-
mide, 1915, 21, 456

— iodide, 1915, 21, 457

m-Methylphenoxyethyl
bromide, 1915, 21, 441*o*-Methylphenoxyethyl
bromide, 1915, 21, 440¹All of these salts were prepared
by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

- p*-Methylphenoxyethyl bromide, 1915, 21, 441
- β -Naphthobenzyl chloride, 1915, 20, 664
- α -Naphthoxyethyl bromide, 1915, 21, 442
- β -Naphthoxyethyl bromide, 1915, 21, 442
- 3-Nitro-4-acetoxybenzyl iodide, 1915, 20, 673
- p*-Nitrobenzoylaminoisopropyl chloroacetate, 1915, 21, 427
- p*-Nitrobenzoyloxyethyl bromide, 1915, 21, 450
- iodide, 1915, 21, 451
- m*-Nitrobenzyl chloride, 1915, 20, 666
- o*-Nitrobenzyl chloride, 1915, 20, 666
- p*-Nitrobenzyl chloride, 1915, 20, 666
- m*-Nitrochloroacetylamine, 1915, 21, 112
- m*-Nitrochloroacetyl-*p*-toluidine, 1915, 21, 112
- 2-Nitro-3,4-dimethoxybenzyl chloride, 1915, 20, 679
- 3-Nitro-4-methoxybenzyl chloride, 1915, 20, 676
- m*-Nitrophenacyl bromide, 1915, 21, 459
- o*-Nitrophenyl bromoacetate, 1915, 21, 470

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetram salts¹—continued:

- 2-Oxy-3-carbomethylnaphthobenzyl, 1915
- 2-Oxy-3-carboxybenzyl chloride, 1915
- 2-Oxy-3,5-dibromobromide, 1915
- Oxyethyl iodide, 1915
- 2-Oxy-3-methoxyhydobenzyl chloride, 1915
- Oxymethylchloromide, 1915
- 2-Oxy-5-nitrobenzyl chloride, 1915
- p*-Phenetyl bromo ketone, 1915
- Phenoxyethyl bromide, 1915
- Phenyl bromoacetate, 1915
- Phenylethyl iodide, 1915
- α -Phenyl- α -oxy- β -acetylaminooethyl, 1915
- β -Phenyl- β -oxy- α -acetylaminopropyl, 1915
- Piperonyl chloride, 1915
- o*-Tolueneazochloro-*o*-toluidine, 1915
- p*-Tolyliodomethyl, 1915
- Tribromo-*p*-methoxyethyl bromide, 1915

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts—continued:

Trimethylene chlorobromide,

1915, 21, 465

Trimethylene iodohydrin,

1915, 21, 466

Ureas, monohalogenacylated,

1915, 21, 145

Urethanes, monohalogenacylated,

1915, 21, 145

m-Xylyl bromomethyl ketone,

1915, 21, 458

o-Xylyl bromomethyl ketone,

1915, 21, 458

m-Xylylene chloride,

1915, 20, 664

o-Xylylene chloride,

1915, 20, 663

Hexatriacontane:

(LEVENE, WEST, and VAN DER SCHEER)

1915, 20, 531

Hexocytidine diphosphoric acid:

Thymus nucleic acid, isolation from (LEVENE and JACOBS)

1912, 12, 419

Hexone bases:

Autolysis of *Glomerella*, formation in (REED)

1914, 19, 257

Bacillus coli communis, cell substance, content of (LEACH)

1905-06, 1, 485

Casein, content of (VAN SLYKE)

1913-14, 16, 531

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexone bases—continued:

Fibrin heteroalbumose, content of (LEVENE, VAN SLYKE, and BIRCHARD)

1910-11, 8, 280;

1911-12, 10, 68

— protoalbumose, content of (LEVENE, VAN SLYKE, and BIRCHARD)

1911-12, 10, 67

Kidney, content of (WAKEMAN)

1908, 4, 121

Liver, content of (WAKEMAN)

1908, 4, 121

Muscle, content of (WAKEMAN)

1908, 4, 121

Tumors, malignant, content of (KOCHER)

1915, 22, 295

Hexonic acid:

Deamino chondrosamine, bromine oxidation of (LEVENE and LA FORGE)

1914, 18, 130

Hexosamine:

See Chondrosamine, Glucosamine.

Hexosaminic acid:

Ribose, preparation from (LEVENE and LA FORGE)

1915, 20, 441

Hexose:

Leukocytes, action of (LEVENE and MEYER)

1913, 14, 149, 551

Phenylosazones, mutarotation of (LEVENE and LA FORGE)

1915, 20, 429

Tissue, kidney, action of (LEVENE and MEYER)

1913, 15, 65

Walden rearrangement in (LEVENE and LA FORGE)

1915, 21, 345

Hexothymidine diphosphoric acid:

Thymus nucleic acid, isolation from (LEVENE and JACOBS)

1912, 12, 417

Hickory nut:

Amino-acid content (NOLLAU)

1915, 21, 614

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***o*-Methylbenzyl chloride:**

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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

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2-Methylmercapto-4-amino-6-oxy-pyrimidine:

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(JACOBS and HEIDELBERGER)

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Hexamethylenetetramin-
ium salt (JACOBS and
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m-Methylphenoxyethyl bro-

mide:
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Hexamethylenetetramin-
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o-Methylphenoxyethyl bro-

mide:
Hexamethylenetetramin-
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HEIDELBERGER)

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p-Methylphenoxyethyl bro-

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4-Methyluracil:

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FORMULA INDEX.

following index of *new* compounds of known empirical formula is arranged according to Richter's system (*Lexikon der Stoff Verbindungen*).

elements are given in the order C, H, O, N, Cl, Br, I, F, and the remainder alphabetically.

compounds are arranged in groups according to the number of carbon atoms (thus, C₁ group, C₂ group, etc.); according to the number of other elements besides carbon contained in the molecule (thus, C₅ IV indicates that the molecule contains five carbon atoms and four other elements); according to the nature of the elements present in the molecule (given in above order); and according to the number of atoms of single element (except carbon) present in the molecule.

Compounds are placed with the compounds from which they are derived. The chlorides, bromides, iodides, and cyanides of primary ammonium bases, however, are registered as group monobases.

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- C₅H₄O₂N₂** Thymine, potassium salt (JOHNSON and CLAPP) 1908-09, 5, 59
—, sodium, lead, mercury, and potassium salts (MYERS) 1909-10, 7, 251
- C₅H₅O₂N₄** Formyl-2-oxy-5,6-diaminopyrimidine (JOHNS) 1912, 11, 66
- C₅H₄O₂N₄** 2-Oxy-3-methyl-5-nitro-6-aminopurine (JOHNS) 1912, 11, 75
2-Oxy-5-nitro-6-methylaminopyrimidine (JOHNS) 1911, 9, 164
- C₅H₇O₂N₃** 4-Imidopseudouric acid (LEVENE and SENIOR) 1916, 25, 618
- C₅H₇O₂N₃** 2-Oxy-3-methyl-6-aminopyrimidine (3-methylcytosine), picrate (JOHNSON and CLAPP) 1908-09, 5, 62
2-Oxy-6-methylaminopyrimidine (JOHNS) 1911, 9, 163
- C₅H₇O₂N₃** α-Oxynitrohydrothymine (JOHNSON) 1908, 4, 410
β-Oxynitrohydrothymine (JOHNSON) 1908, 4, 414
- C₅H₅ON₄** 2-Oxy-5-amino-6-methylaminopyrimidine (JOHNS) 1911, 9, 165
2-Oxy-3-methyl-5,6-diaminopyrimidine (JOHNS) 1912, 11, 77
- C₅H₉O₄N** *d*-Glutaminic acid, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 132
dl-Glutaminic acid, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 132
- C₅H₁₁O₂N** *d*-Valine, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 136
dl-Valine, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 137
- C₅H₁₁O₄N** *d*-Lyxosimine (LEVENE and LA FORGE) 1915, 22, 333
Ribosimine (LEVENE and LA FORGE) 1915, 20, 440

C, IV

- C₅H₄ON₄S** 2-Oxy-8-thiopurine (JOHNS) 1915, 21, 321
- C₅H₄ON₄S₂** 2,8-Dithio-6-oxypurine (JOHNS and HOGAN) 1913, 14, 305
- C₅H₄O₂N₄S** 2-Thio-6,8-dioxypurine (JOHNS and HOGAN) 1913, 14, 302

- $\text{C}_5\text{H}_5\text{O}_2\text{N}_2\text{Br}$ 3-Methyl-5-bromouracil (JOHNSON and CLAPP)
1908-09, 5, 64
- $\text{C}_5\text{H}_5\text{O}_2\text{N}_4\text{S}$ 2-Methylmercapto-4-amino-5-nitroso-6-oxypyrimidine (JOHNS and BAUMANN) 1913, 14, 384
- $\text{C}_5\text{H}_5\text{ON}_4\text{S}$ 2-Methylmercapto-4,5-diamino-6-oxypyrimidine (JOHNS and BAUMANN) 1913, 14, 385
- $\text{C}_5\text{H}_5\text{O}_2\text{N}_2\text{I}_2$ Methylene bisiodoacetamide (JACOBS and HEIDELBERGER) 1915, 21, 150
- $\text{C}_5\text{H}_{10}\text{O}_2\text{NCl}$ Chloroacetylaminoisopropanol (JACOBS and HEIDELBERGER) 1915, 21, 424

C, Group

C, II

- $\text{C}_6\text{H}_8\text{O}_7$ α, α_1 -Anhydro-idosaccharic acid (LEVENE and LA FORGE) 1915, 21, 357
- α, α_1 -Anhydromucic acid (LEVENE and LA FORGE) 1915, 22, 334
- α, α_1 -*l*-Anhydrosaccharic acid (LEVENE and LA FORGE) 1915, 21, 358
- Chondrosic acid (LEVENE and LA FORGE) 1914, 18, 128; 1915, 20, 438
- Epichondrosic acid (LEVENE and LA FORGE) 1915, 20, 439
- l*-Epi-isosaccharic acid (LEVENE and LA FORGE) 1915, 20, 442; 1915, 21, 358
- $\text{C}_6\text{H}_{10}\text{O}_8$ Mycodextran (DOX and NEIDIG) 1914, 18, 172
- Myogalactan (DOX and NEIDIG) 1914, 19, 235
- $\text{C}_6\text{H}_{10}\text{O}_8$ Acid from oxidation of chondrosin (LEVENE and LA FORGE) 1913, 15, 78

C, III

- $\text{C}_8\text{H}_6\text{ON}_4$ 2-Oxy-1-methylpurine, picrate (JOHNS) 1912, 11, 78
- 2-Oxy-8-methylpurine, picrate (JOHNS) 1912, 11, 71
- 2-Oxy-9-methylpurine (JOHNS) 1911, 9, 166
- $\text{C}_8\text{H}_6\text{O}_2\text{N}_2$ "Urocanic acid" (β -imidazole-4(5)-acrylic acid), picrate, and picrolonate (HUNTER) 1912, 11, 537
- $\text{C}_8\text{H}_6\text{O}_2\text{N}_4$ 2,8-Dioxy-1-methylpurine (JOHNS) 1912, 11, 398
- 2,6-Dioxy-9-methylpurine (JOHNS) 1911, 9, 167

- C₆H₆O₄N₂** Thymine-4-carboxylic acid (JOHNSON) 1907, 3, 304
 —, lead, barium, and potassium salts (JOHNSON) 1907, 3, 304
- C₆H₇ON₂** Acetyl-6-aminopyrimidine (WHEELER) 1907, 3, 291
- C₆H₇O₄N₂** 2,6-Dioxy-3,4-dimethyl-5-nitropyrimidine (JOHNS and BAUMANN) 1913-14, 16, 139
- C₆H₈O₂N₂** 1,5-Dimethyl-2,6-dioxypyrimidine (1-methylthymine) (JOHNSON and CLAPP) 1908-09, 5, 56
 3,5-Dimethyl-2,6-dioxypyrimidine (3-methylthymine) (JOHNSON and CLAPP) 1908-09, 5, 56
 1,3-Dimethyluracil (JOHNSON and CLAPP) 1908-09, 5, 61
 2,6-Dioxy-5-ethylpyrimidine (5-ethyluracil) (JOHNSON and MENGE) 1906-07, 2, 111
- C₆H₈O₂N₄** Acetyl-2-oxy-5,6-diaminopyrimidine (JOHNS) 1912, 11, 71
 Formyl-2-oxy-3-methyl-5,6-diaminopyrimidine (JOHNS) 1912, 11, 77
- C₆H₈O₃N₂** Acetylformamide acrylic acid (WHEELER) 1907, 3, 291
 2,6-Dioxy-5-ethoxypyrimidine (JOHNSON and McCOLLUM) 1905-06, 1, 445
 2,6-Dioxy-4-hydroxymethyl-5-methylpyrimidine (JOHNSON and CHERNOFF) 1913, 14, 319
- C₆H₈O₂N₄** 2-Oxy-3,4-dimethyl-5-nitro-6-aminopyrimidine (JOHNS and BAUMANN) 1913-14, 16, 137
 2-Oxy-3-methyl-5-nitro-6-methylaminopyrimidine (JOHNS) 1913, 14, 3; 1914, 17, 4
 2-Oxy-4-methyl-5-nitro-6-methylaminopyrimidine (JOHNS) 1912, 11, 396
 2-Oxy-5-nitro-6-ethylaminopyrimidine (JOHNS and HENDRIX) 1914, 19, 28
- C₆H₈ON₂** 2-Oxy-3,5-dimethyl-6-aminopyrimidine (JOHNSON and CLAPP) 1908-09, 5, 65
 2-Oxy-6-ethylaminopyrimidine (JOHNS and HENDRIX) 1914, 19, 27
 2-Oxy-5-ethyl-6-aminopyrimidine (5-ethylcytosine) (JOHNSON and MENGE) 1906-07, 2, 112
 —, chloroplatinate, hydrobromide, hydrochloride, nitrate, picrate (JOHNSON and MENGE) 1906-07, 2, 112
 2-Oxy-4-methyl-6-methylaminopyrimidine (JOHNS) 1912, 11, 395

- O₂N₂** 2-Amino-5-ethoxy-6-oxypyrimidine (JOHNSON and McCOLLUM) 1905-06, 1, 448
 α -Cyanobutyrylurea (JOHNSON and JOHNS) 1905-06, 1, 317
 2,4-Dioxy-5-ethyl-6-aminopyrimidine (JOHNSON and JOHNS) 1905-06, 1, 317
 2-Oxy-5-ethoxy-6-aminopyrimidine (5-ethoxycytosine) (JOHNSON and McCOLLUM) 1905-06, 1, 445
- O₆N₂** 1-Methyl-5-nitro-4-oxyhydrothymine (JOHNSON and CLAPP) 1908-09, 5, 58
 3-Methyl-5-nitro-4-oxyhydrothymine (JOHNSON and CLAPP) 1908-09, 5, 58
- ₂ON₄** 2-Oxy-5-amino-6-ethylaminopyrimidine (JOHNS and HENDRIX) 1914, 19, 28
 2-Oxy-3,4-dimethyl-5,6-diaminopyrimidine (JOHNS and BAUMANN) 1913-14, 16, 140
 2-Oxy-3-methyl-5-amino-6-methylaminopyrimidine (JOHNS) 1913, 14, 4
 2-Oxy-4-methyl-5-amino-6-methylaminopyrimidine (JOHNS) 1912, 11, 397
- ₃O₂N** *d*-Isoleucine, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 133
d-Leucine, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 134
l-Leucine, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 133
dl-Leucine, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 134
- ₃O₂N** Chondrosaminic acid, reduction product (LEVENE and LA FORGE) 1915, 20, 437
- ₃O₆N** Chondrosamine (LEVENE and LA FORGE) 1913, 15, 158; 1914, 18, 126, 240
- ₃O₆N** Chondrosaminic acid (LEVENE and LA FORGE) 1915, 20, 436
 Hexosaminic acid from ribose (LEVENE and LA FORGE) 1915, 20, 441
d-Lyxohexosaminic acid (LEVENE and LA FORGE) 1915, 22, 333
 Xylohexosaminic acid (LEVENE and LA FORGE) 1915, 21, 354
- ₃P₁** Inosite monophosphate, barium salt (ANDERSON) 1914, 18, 444
- ₅O₁₅P₃** Inosite triphosphate, barium salts, strychnine salt (ANDERSON) 1915, 20, 470
- ₅O₁₅P₄** Inosite dipyrophosphoric acid ester, barium salt (ANDERSON) 1912, 12, 109

- $C_6H_{16}O_{11}P_4$ Inosite tetrphosphoric acid ester, barium salt
(ANDERSON) 1912, 11, 484
- $C_6H_2O_{27}P_6$ Phytic acid (ANDERSON)
1912, 11, 478; 1912, 12, 103;
1912-13, 13, 316; 1914, 17, 144,
154, 166, 175; 1915, 20, 496
- , tribarium, pentabarium, pentabarium am-
monium, pentamagnesium ammonium, tetracuprie
dicalcium salts (ANDERSON) 1912, 11, 478
- , calcium magnesium potassium, pentacalcium,
pentamagnesium, hexacopper, heptasilver, octasilver
salts (ANDERSON) 1912, 12, 103

C, IV

- $C_6H_6ON_4S$ 2-Oxy-8-methylmercaptapurine (JOHNS)
1915, 21, 322
- $C_6H_6ON_4S_2$ 2-Methylmercapto-6-oxy-8-thiopurine (JOHNS and
BAUMANN) 1913, 15, 521
- $C_6H_6O_2N_4S$ 2-Methylmercapto-6,8-dioxypurine (JOHNS and
BAUMANN) 1913, 14, 386
- $C_6H_7ON_4S$ 2-Methylmercapto-6-oxy-8-aminopurine (JOHNS and
BAUMANN) 1913, 14, 387
- 2-Oxy-8-methylaminopurine (JOHNS)
1915, 21, 322
- $C_6H_7O_2N_4Cl$ 2,6-Dioxy-4-chloromethyl-5-methylpyrimidine
(JOHNSON and CHERNOFF) 1913, 14, 318
- $C_6H_7O_2N_4Br$ 1,3-Dimethyl-5-bromouracil (JOHNSON and CLAPP)
1908-09, 5, 62
- $C_6H_7O_2N_4Br$ Oxybromohydrothymine-4-carboxylic acid (JOHN-
SON) 1907, 3, 306
- $C_6H_8ON_4S$ 2-Thio-3,5-dimethyl-6-oxypyrimidine (JOHNSON and
CLAPP) 1908-09, 5, 56
- $C_6H_8O_2N_4S$ 2-Thio-3-acetyl-4-methylhydantoin (JOHNSON)
1912, 11, 99
- $C_6H_8O_2N_4S$ 1-Methyl-2-methylmercapto-4-amino-5-nitroso-6-
oxypyrimidine (JOHNS and HENDRIX)
1915, 20, 158
- $C_6H_8O_2N_4Br_2$ 1,3-Dimethyldibromooxyhydrouracil (JOHNSON
and CLAPP) 1908-09, 5, 61
- $C_6H_8N_4SI$ 2-Ethylmercapto-5-iodo-6-aminopyrimidine (JOHN-
SON and JOHNS) 1905-06, 1, 313
- $C_6H_8ON_4S$ 2-Methylmercapto-4-amino-6-methoxypyrimidine
(JOHNS and HENDRIX) 1915, 20, 156
- 1-Methyl-2-methylmercapto-4-amino-6-oxypyrim-
idine (JOHNS and HENDRIX) 1915, 20, 157
- $C_6H_8O_2N_4Br$ 1-Methyl-5-bromo-4-oxyhydrothymine (JOHNSON
and CLAPP) 1908-09, 5, 57

- C₆H₁₀ON₂S** 1-Methyl-2-methylmercapto-4,5-diamino-6-oxypyrimidine (JOHNS and HENDRIX) 1915, 20, 159
- C₆H₁₀O₂N₂Cl** Ethylenebischloroacetamide (JACOBS and HEIDELBERGER) 1915, 21, 151
- C₆H₁₂ONCl** Chloroacetdiethylamide (JACOBS and HEIDELBERGER) 1915, 21, 149
- C₆H₁₂O₂NCl** β -Chloroacetyl-amino- γ -butanol (JACOBS and HEIDELBERGER) 1915, 21, 428
- δ -Chloroacetyl-amino-*n*-butanol (JACOBS and HEIDELBERGER) 1915, 21, 427
- Chloroacetyl-ethylaminoethanol (JACOBS and HEIDELBERGER) 1915, 21, 417
- Chloroacetyl-aminoethyl ethyl ether (JACOBS and HEIDELBERGER) 1915, 21, 415
- C₆H₁₂O₅NCl** Xylohexosaminic acid lactone hydrochloride (LEVENE and LA FORGE) 1915, 21, 355
- C₆H₁₆ONCl** α -Methylcholine chloride, chloroplatinate, chloraurate (MENGE) 1911-12, 10, 400
- C₆H₁₈O₂P₆** Inosite hexaphosphate, tribarium and pentabarium salts (ANDERSON) 1914, 17, 147, 160, 167, 178

C₆ V

- C₆H₄N₂SClI** 2-Ethylmercapto-5-iodo-6-chloropyrimidine (JOHNSON and JOHNS) 1905-06, 1, 313
- C₆H₇ON₂SI** 2-Ethylmercapto-5-iodo-6-oxypyrimidine (JOHNSON and JOHNS) 1905-06, 1, 310

C₇ Group**C₇ II**

- C₇H₁₆O₇** *d*- β -Galaheptite (PEIRCE) 1915, 23, 335
- d*- β -Mannoheptite (PEIRCE) 1915, 23, 334

C₇ III

- C₇H₆ClBr** *o*-Bromobenzyl chloride (JACOBS and HEIDELBERGER) 1915, 20, 665
- C₇H₈ON₄** 2-Oxy-6,8-dimethylpurine (JOHNS) 1913, 14, 6
- 2-Oxy-6,9-dimethylpurine, picrate (JOHNS) 1912, 12, 94
- 2-Oxy-8,9-dimethylpurine, picrate (JOHNS) 1912, 12, 95
- C₇H₈O₂N₄** 2,8-Dioxy-1,6-dimethylpurine (JOHNS and BAUMANN) 1913-14, 16, 141
- 2,8-Dioxy-1,7-dimethylpurine (JOHNS) 1914, 17, 6

C₇H₈O₂N₄—*continued*:

- 2,8-Dioxy-1,9-dimethylpurine (JOHNS)
1913, 14, 5; 1914, 17, 7
- 2,8-Dioxy-6,9-dimethylpurine (JOHNS)
1912, 11, 397
- 2,8-Dioxy-9-ethylpurine (JOHNS and HENDRIX)
1914, 19, 29
- C₇H₁₀O₂N₂** 1,3-Dimethylthymine (JOHNSON and CLAPP)
1908-09, 5, 59
- C₇H₁₀O₂N₄** 2-Oxy-4-methyl-5-nitro-6-ethylaminopyrimidine
(JOHNS and BAUMANN) 1913, 15, 122
- C₇H₁₁ON₃** 2-Oxy-4-methyl-6-ethylaminopyrimidine and hydrochloride (JOHNS and BAUMANN) 1913, 15, 121
- C₇H₁₁N₃S** 2-Ethylmercapto-6-methylaminopyrimidine (JOHNS)
1911, 9, 163
- C₇H₁₂ON₄** 2-Oxy-4-methyl-5-amino-6-ethylaminopyrimidine
(JOHNS and BAUMANN) 1913, 15, 123

C₇ IV

- C₇H₆O₈N₄S** Hypoxanthine-2-thioglycollic acid (JOHNS and HOGAN)
1913, 14, 304
- C₇H₆O₄N₄S** 6,8-Dioxypurine-2-thioglycollic acid (JOHNS and HOGAN)
1913, 14, 302
- C₇H₈ON₃S** 2-Oxy-6,9-dimethyl-8-thiopurine (JOHNS)
1915, 21, 323
- C₇H₈O₂N₄S** 1-Methyl-2-methylmercapto-6,8-dioxypurine
(JOHNS and HENDRIX) 1915, 20, 159
- C₇H₈O₃N₂S** 2-Methylmercapto-4-carboxyl-5-methyl-6-oxypyrimidine (JOHNSON)
1907, 3, 302
- C₇H₁₀O₂N₂S** 2-Methylmercapto-5-ethoxy-6-oxypyrimidine
(JOHNSON and McCOLLUM) 1905-06, 1, 447
- C₇H₁₁O₃N₂Br** 1,3-Dimethyl-5-bromo-4-oxyhydrothymine
(JOHNSON and CLAPP) 1908-09, 5, 60
- C₇H₁₂ONCl** Chloroacetylperidide (JACOBS and HEIDELBERGER)
1915, 21, 150
- C₇H₁₄O₂NCl** γ -Chloroacetyl-amino- β -methyl- β -butanol (JACOBS and HEIDELBERGER)
1915, 21, 431
- Chloroacetylaminomethylmethylethylcarbinol
(α -chloroacetyl-amino- β -methyl- β -butanol) (JACOBS and HEIDELBERGER)
1915, 21, 430
- γ -Chloroacetyl-amino- β -pentanol (JACOBS and HEIDELBERGER)
1915, 21, 429
- C₇H₁₇O₂N₂I** Iodoacetylaminooethanol trimethylamine salt (JACOBS and HEIDELBERGER)
1915, 21, 408
- C₇H₁₈ONCl** β -Dimethylcholine chloride, chloroplatinate
(MENGE) 1911-12, 10, 404

C, Group**C, II**

- O_8 *d*- α -Mannooctaric acid double lactone (PEIRCE)
1915, 23, 337
 N Coniine, picrolonate (WARREN and WEISS)
1907, 3, 333

C, III

- I_4N_2 Glyoxylic acid *p*-nitrophenylhydrazone (DAKIN)
1908, 4, 237
 OBr_2 *p*-Bromophenoxyethyl bromide (JACOBS and HEI-
DELBERGER) 1915, 21, 444
 I_4N 2-Methoxy-5-nitrobenzyl alcohol (JACOBS and HEI-
DELBERGER) 1915, 20, 675
 ON_4 2-Oxy-6-methyl-9-ethylpurine (JOHNS and BAU-
MANN) 1913, 15, 517
 2-Oxy-6,8,9-trimethylpurine (JOHNS)
1912, 12, 93
 O_2N_4 2,8-Dioxy-6-methyl-9-ethylpurine (JOHNS and BAU-
MANN) 1913, 15, 124
 2,8-Dioxy-1,7,9-trimethylpurine (JOHNS)
1914, 17, 4
 I_4N_2 2,6-Dioxy-4-hydroxymethyl-5-methylpyrimidine
acetate (JOHNSON and CHERNOFF) 1913, 14, 318
 Thymine-4-ethyl carboxylate (JOHNSON)
1907, 3, 306
 O_2N_4 Acetyl-2-oxy-4-methyl-5-amino-6-methylaminopyr-
imidine (JOHNS) 1912, 12, 92
 O_2N_2 2,6-Dioxy-4-ethoxymethyl-5-methylpyrimidine
(JOHNSON and CHERNOFF) 1913, 14, 317
 N_3S 2-Ethylmercapto-5-ethyl-6-aminopyrimidine (JOHN-
SON and MENGE) 1906-07, 2, 111
 2-Ethylmercapto-6-ethylaminopyrimidine (JOHNS
and HENDRIX) 1914, 19, 27
 2-Ethylmercapto-4-methyl-6-methylaminopyrimi-
dine (JOHNS) 1912, 11, 395
 O_2P_6 Dimethylphytate (ANDERSON) 1914, 17, 188

C, IV

- ICl_3Br 2,4,6-Trichlorophenoxyethyl bromide (JACOBS and
HEIDELBERGER) 1915, 21, 442
 I_4NBr *o*-Nitrophenyl bromoacetate (JACOBS and HEIDEL-
BERGER) 1915, 21, 469
 $\text{I}_3\text{N}_2\text{Cl}$ *p*-Nitrochloroacetylaniline (JACOBS and HEIDEL-
BERGER) 1915, 21, 112

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|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| $C_8H_{17}ON_4I$ | Oxyethylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) | 1915, 13, 513 |
| $C_8H_{18}O_2NCl$ | Acetyl- α -methylcholine chloride (acetyl- β -methoxytrimethylammonium chloride), chloroplatinate, and chloraurate (MENGE) | 1915, 21, 465
1912-13, 13, 98 |
| $C_8H_{20}ONCl$ | β , β -Methylethylcholine chloride, chloroplatinate (MENGE) | 1911-12, 10, 405 |

C₈ V

- | | | |
|--------------------|--------------------------------------------------------------------|-----------------|
| $C_8H_5ONClBr$ | 2,4,6-Tribromochloroacetylaniline (JACOBS and HEIDELBERGER) | 1915, 21, 111 |
| C_8H_5ONCl | <i>m</i> -Iodochloroacetylaniline (JACOBS and HEIDELBERGER) | 1915, 21, 111 |
| $C_8H_{11}ON_2SCl$ | 2-Ethylmercapto-5-ethoxy-6-chloropyrimidine (JOHNSON and MCCOLLUM) | 1905-06, 1, 443 |

C, Group

C, II

- H_8O_2 Benzylglyoxal (DAKIN and DUDLEY) 1914, 18, 43
 $H_{12}O_2$ 2,4-Dimethoxybenzyl alcohol (JACOBS and HEIDELBERGER) 1915, 20, 678
 $H_{16}O_4$ Ethyl methylethoxyacetoacetate (JOHNSON and CHERNOFF) 1913, 14, 315

C, III

- $H_6O_2Br_4$ Tribromo-*p*-cresyl bromoacetate (JACOBS and HEIDELBERGER) 1915, 21, 469
 H_7OBr_4 Tetrabromo-*p*-methylphenoxyethyl bromide (JACOBS and HEIDELBERGER) 1915, 21, 445
 H_8OBr_4 Tribromo-*p*-methylphenoxyethyl bromide (tribromo-*p*-cresoxyethyl bromide) (JACOBS and HEIDELBERGER) 1915, 21, 444
 H_8OS 1-Phenyl-2-thiohydantoin (BRAUTLECHT) 1911-12, 10, 143
 H_8OI *p*-Methylphenacyl iodide (JACOBS and HEIDELBERGER) 1915, 21, 456
 p-Tolyl iodomethyl ketone (JACOBS and HEIDELBERGER) 1915, 21, 456
 $H_{11}OBr$ *m*-Methylphenoxyethyl bromide (JACOBS and HEIDELBERGER) 1915, 21, 440
 $H_{11}O_2N$ Phenylalanine (JOHNSON and O'BRIEN) 1912, 12, 212
 —, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 136
 L-Phenylalanine, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 135
 $H_{11}O_2N_2$ Propionic aldehyde *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 236
 $H_{11}O_2Cl$ 2,3-Dimethoxybenzyl chloride (JACOBS and HEIDELBERGER) 1915, 20, 677
 $H_{11}O_6N$ Tyrosine, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 136
 $H_{12}ON_4$ 2-Oxy-6,8-dimethyl-9-ethylpurine (JOHNS and BAUMANN) 1913, 15, 518
 $H_{13}ON$ Aminoethyl *o*-tolyl ether (*o*-methylphenoxyethylamine) (JACOBS and HEIDELBERGER) 1915, 21, 416
 α -*p*-Tolyl- α -oxyethylamine (JACOBS and HEIDELBERGER) 1915, 21, 432
 $H_{15}N_2S$ 2-Ethylmercapto-4-methyl-6-ethylaminopyrimidine (JOHNS and BAUMANN) 1913, 15, 121

C, IV

- C₉H₈O₄NCI** 3-Nitro-4-acetoxybenzyl chloride (JACOBS and HEIDELBERGER) 1915, 20, 672
 3-Nitro-6-acetoxybenzyl chloride (JACOBS and HEIDELBERGER) 1915, 20, 673
- C₉H₈O₄NBr** Bromoethyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 450
- C₉H₈O₄NI** 3-Nitro-4-acetoxybenzyl iodide (JACOBS and HEIDELBERGER) 1915, 20, 672
- C₉H₈O₅N₄S₂** 6-Oxypurine-2,8-dithioglycollic acid (JOHNS and HOGAN) 1913, 14, 306
- C₉H₈O₃NCI₂** 3,5-Dichlorotyrosine (WHEELER, HOFFMAN, and JOHNSON) 1911-12, 10, 153
- C₉H₁₀ONCI** Chloroacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 686
 Chloroacetyl-*m*-toluidine (JACOBS and HEIDELBERGER) 1915, 21, 108
- C₉H₁₀O₂NCl** *o*-Chloroacetylaminobenzyl alcohol (JACOBS and HEIDELBERGER) 1915, 21, 138
 Chloroacetyl-*o*-anisidine (JACOBS and HEIDELBERGER) 1915, 21, 134
 Chloroacetyl-*p*-anisidine (JACOBS and HEIDELBERGER) 1915, 21, 137
- C₉H₁₀O₂NBr** 2-Bromoethoxybenzamide (JACOBS and HEIDELBERGER) 1915, 21, 449
- C₉H₁₀O₃N₂Hg** *p*-Methylnitrosoaminophenylmercuric acetate (JACOBS and HEIDELBERGER) 1915, 20, 519
- C₉H₁₁O₂NS** Thiotyrosine and hydrochloride (JOHNSON and BRAUTLECHT) 1912, 12, 194
- C₉H₁₁O₂NHg** 3-Methyl-4-aminophenylmercuric acetate (JACOBS and HEIDELBERGER) 1915, 20, 519
- C₉H₁₂O₃N₂S** 2-Methylmercapto-4-carbethoxy-5-methyl-6-oxypyrimidine (JOHNSON) 1907, 3, 302
- C₉H₁₇O₂N₆Cl** Chloroacetylurea and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 151
- C₉H₁₈ON₅Cl** Chloroacetmethylamide and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 148
- C₉H₁₈ON₅I** β -Iodopropionamide and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 147
- C₉H₁₈O₂N₅Cl** Oxymethylchloroacetamide and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 406
- C₉H₁₈N₄ClBr** γ -Chloropropylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 465

- ON₄I γ -Oxypropylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) 1915, 21, 466
- O₂NCI Propionyl- α -methylcholine chloride (propionyl- β -methylethoxytrimethylammonium chloride), chloroplatinate, and chlorosaurate (MENGE) 1912-13, 13, 105

C₉ V

- ONCII 5-Iodochloroacetyl-*o*-toluidine (JACOBS and HEIDELBERGER) 1915, 21, 111

C₁₀ GroupC₁₀ II

- O₃ *p*-Methylphenylpyruvic acid (WAKEMAN and DAKIN) 1911, 9, 149
- O₄ *p*-Methoxyphenylpyruvic acid (WAKEMAN and DAKIN) 1911, 9, 150
- O₄ Oxyethyl anisate (JACOBS and HEIDELBERGER) 1915, 21, 470
- N₂ Nicotine, picrolonate (WARREN and WEISS) 1907, 3, 333

C₁₀ III

- O₃N γ -Hydroxy- β -carboxyquinoline (HOMER) 1914, 17, 514
- ON₃ 2-Anilino-6-oxypyrimidine (JOHNSON and JOHNS) 1905-06, 1, 314
- O₄N₃ 4-*p*-Nitrobenzylhydantoin (JOHNSON and BRAUTLECHT) 1912, 12, 188
- O₂N₂ *d*-Benzylhydantoin (DAKIN and DUDLEY) 1914, 17, 35
- l*-Benzylhydantoin (DAKIN and DUDLEY) 1914, 17, 36
- Phenyldihydrouracil (DAKIN) 1910-11, 8, 38
- O₃N₂ Tyrosinehydantoin (JOHNSON and BRAUTLECHT) 1912, 12, 187
- d-p*-Hydroxybenzylhydantoin (DAKIN) 1910-11, 8, 28
- l-p*-Hydroxybenzylhydantoin (DAKIN) 1910-11, 8, 31
- dl-p*-Hydroxybenzylhydantoin (DAKIN) 1910-11, 8, 30

- C₁₆H₁₁OBr** *p*-Ethylphenyl bromomethyl ketone (*p*-ethylphenyl acyl bromide (JACOBS and HEIDELBERGER) 1915, 21, 458
m-Xylyl bromomethyl ketone (JACOBS and HEIDELBERGER) 1915, 21, 458
o-Xylyl bromomethyl ketone (JACOBS and HEIDELBERGER) 1915, 21, 457
- C₁₆H₁₁O₂N₂** 4-*p*-Aminobenzylhydantoin, hydrochloride, and hydroiodide (JOHNSON and BRAUTLECHT) 1912, 12, 186
- C₁₈H₁₁O₂Br** Bromoethyl anisate (JACOBS and HEIDELBERGER) 1915, 21, 452
o-Carbomethoxyphenoxyethyl bromide (methyl 2-bromoethoxybenzoate) (JACOBS and HEIDELBERGER) 1915, 21, 448
- C₁₈H₁₂O₂N₂** *l*-β-Phenyl-α-uramidopropionic acid and strychnine salt (DAKIN and DUDLEY) 1914, 17, 33
d-β-Phenyl-α-uramidopropionic acid (DAKIN and DUDLEY) 1914, 17, 34
dl-β-Phenyl-α-uramidopropionic acid (DAKIN) 1909, 6, 241
Phenyl-β-uramidopropionic acid (DAKIN) 1910-11, 8, 38
- C₁₈H₁₂O₄N₂** Aminoisopropyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 425
γ-Aminopropyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 421
Oxyisopropyl *p*-nitrobenzamide (JACOBS and HEIDELBERGER) 1915, 21, 426
γ-Oxypropyl *p*-nitrobenzamide (JACOBS and HEIDELBERGER) 1915, 21, 422
- C₁₈H₁₃O₂N** *p*-Methylphenylalanine (DAKIN) 1911, 9, 155
- C₁₈H₁₃O₂N₂** *n*-Butyric aldehyde *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 237
Isobutyric aldehyde *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 237
Methylethyl ketone *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 238
- C₁₈H₁₃O₂Cl** 3-Methoxy-4-ethoxybenzyl chloride (JACOBS and HEIDELBERGER) 1915, 20, 680
- C₁₈H₁₃O₂N** *p*-Methoxyphenylalanine (methyltyrosine) (DAKIN) 1910-11, 8, 20
- C₁₈H₁₄NBr** *m*-Bromodiethylaniline (JACOBS and HEIDELBERGER) 1915, 21, 127
- C₁₈H₁₆ON₂** *p*-Dimethylaminophenylaminoethanol (JACOBS and HEIDELBERGER) 1915, 21, 420

$H_{16}O_2N_4$	Vicine (LEVENE and SENIOR)	1916, 25, 611
$H_{19}O_2Br$	<i>sec.</i> -Octyl bromoacetate (JACOBS and HEIDELBERGER)	1915, 21, 468

C₁₀ IV

$H_7O_2N_2Cl$	α -Chlorobenzalhydantoin (WHEELER, HOFFMAN, and JOHNSON)	1911-12, 10, 156
$H_7O_2N_2Br$	α -Bromobenzalhydantoin (WHEELER, HOFFMAN, and JOHNSON)	1911-12, 10, 154
$H_8O_2N_2S$	α -Mercaptobenzalhydantoin (WHEELER, HOFFMAN, and JOHNSON)	1911-12, 10, 155
$H_8O_2N_2Cl_2$	3,5-Dichlorotyrosinehydantoin (WHEELER, HOFFMAN, and JOHNSON)	1911-12, 10, 152
$H_9O_2NCl_2$	<i>m</i> -Chloroacetylaminomethylbenzoyl chloride (JACOBS and HEIDELBERGER)	1915, 20, 693
$H_9O_2NCl_2$	<i>p</i> -Chloroacetylaminophenyl chloroacetate (JACOBS and HEIDELBERGER)	1915, 21, 134
$H_{10}ON_2S$	2-Thio-4-benzylhydantoin (JOHNSON and O'BRIEN)	1912, 12, 211
$H_{10}O_2NCl$	<i>m</i> -Chloroacetylaminacetophenone (JACOBS and HEIDELBERGER)	1915, 21, 140
	ω -Chloroacetylaminacetophenone (JACOBS and HEIDELBERGER)	1915, 21, 472
$H_{10}O_2NBr$	<i>p</i> -Acetaminophenyl bromomethyl ketone (<i>p</i> -acetaminophenacyl bromide) (JACOBS and HEIDELBERGER)	1915, 21, 459
$H_{10}O_2N_2S$	Thietyrosinehydantoin (JOHNSON and BRAUTLECHT)	1912, 12, 190
$H_{10}O_2NCl$	Chloroacetylaminomethyl benzoate (JACOBS and HEIDELBERGER)	1915, 21, 406
$H_{11}O_2N_2Cl$	Chloroacetylbenzylurea (JACOBS and HEIDELBERGER)	1915, 21, 152
	<i>m</i> -Chloroacetylaminomethylbenzamide (JACOBS and HEIDELBERGER)	1915, 20, 694
$H_{11}O_3N_2Br$	γ -Bromopropyl- <i>p</i> -nitrobenzamide (JACOBS and HEIDELBERGER)	1915, 21, 421
$H_{11}O_4N_2Cl$	2-Methoxy-5-nitrochloroacetylbenzylamine (JACOBS and HEIDELBERGER)	1915, 20, 691
$H_{12}ONCl$	Chloroacetyl- <i>o</i> -methylbenzylamine (JACOBS and HEIDELBERGER)	1915, 20, 686
$H_{12}ONCl_2$	2,4,6-Trichlorophenoxyethyldimethylamine (JACOBS and HEIDELBERGER)	1915, 21, 443
$H_{12}O_2NCl$	Chloroacetylphenylaminoethanol (JACOBS and HEIDELBERGER)	1915, 21, 418
	α -Phenyl- α -oxy- β -chloroacetylaminethane (JACOBS and HEIDELBERGER)	1915, 21, 431

- C₁₉H₁₂O₂NBr** *o*-Acetaminophenoxyethyl bromide (JACOBS and HEIDELBERGER) 1915, 21, 446
 Bromoacetylphenylaminoethanol (JACOBS and HEIDELBERGER) 1915, 21, 419
- C₁₆H₁₂O₂NI** α -Iodopropionyl-*o*-anisidine (JACOBS and HEIDELBERGER) 1915, 21, 135
 β -Iodopropionyl-*o*-anisidine (JACOBS and HEIDELBERGER) 1915, 21, 136
- C₁₉H₁₂O₃N₂S** 2-Oxy-6-methyl-9-ethylpurine-8-thioglycolic acid (JOHNS and BAUMANN) 1913, 15, 520
- C₁₉H₁₃ON₂Cl** *m*-Chloroacetylaminodimethylaniline (JACOBS and HEIDELBERGER) 1915, 21, 113
- C₁₉H₁₄O₃N₅P** Guanylic acid, barium and brucine salts (LEVENE and JACOBS) 1912, 12, 424
 (JONES and RICHARDS) 1915, 20, 33
- C₁₉H₁₇O₁₂N₅P₂** Hexocytidine diphosphoric acid, barium and brucine salts (LEVENE and JACOBS) 1912, 12, 419
- C₁₉H₁₉O₂N₄Br** Acetoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 449
- C₁₀H₁₉O₂N₆Cl** Chloroacetylmethylurea and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 151
- C₁₉H₂₀ON₆Cl** Chloroacetdimethylamide and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 148
 Chloroacetethylamide and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 149
- C₁₀H₂₀O₂N₅I** Iodoacetylaminethanol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 408

C₁₁ Group

C₁₁ II

- C₁₁H₂₃I** Undecylic iodide (LEVENE, WEST, ALLEN, and VAN DER SCHEER) 1915, 23, 72

C₁₁ III

- C₁₁H₁₁ON₃** 2-Oxy-6-methylphenylaminopyrimidine (JOHNSON and CLAPP) 1908-09, 5, 64
- C₁₁H₁₁O₃N** Cinnamoylglycocol (DAKIN) 1908-09, 5, 305
- C₁₁H₁₁O₄Br** Bromoethyl acetylsalicylate (JACOBS and HEIDELBERGER) 1915, 21, 451

- O_3N_2 *p*-Methoxybenzylhydantoin (WHEELER, HOFFMAN, and JOHNSON) 1911-12, 10, 156
 OBr Mesityl bromomethyl ketone (2,4,6-trimethylphenyl bromide) (JACOBS and HEIDELBERGER) 1915, 21, 459
 O_2Cl 2-Acetoxy-3,5-dimethylbenzyl chloride (*o*-acetoxy-mesityl pseudochloride) (JACOBS and HEIDELBERGER) 1915, 20, 670
 O_3N Phenylpropionylglycocoll (DAKIN) 1908, 4, 431
 O_4N Phenyl- β -oxypropionylglycocoll (DAKIN) 1908-09, 5, 308
 O_3N *p*-Methyl- α -uramidophenylpropionic acid (DAKIN) 1911, 9, 159
 O_2N_3 Isovaleric aldehyde *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 237
Methylisopropyl ketone *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 238
 O_3N_5 Adenine hexose compound (MANDEL and DUNHAM) 1912, 11, 85
 O_6N_3 *d*-Lyxose *p*-nitrophenylhydrazone (LEVENE and LA FORGE) 1914, 18, 326
 O_6N_5 Guanine hexoside from thymus nucleic acid (LEVENE and JACOBS) 1912, 12, 378
 N_5O_5 Arginine-glutaminic acid dipeptide from gelatin (LEVENE and BIRCHARD) 1912-13, 13, 285

C₁₁ IV

- $\text{O}_3\text{N}_2\text{S}$ 2-Thio-4-piperonalhydantoin (JOHNSON and O'BRIEN) 1912, 12, 213
 $\text{O}_2\text{N}_2\text{Cl}$ 6-Chloroacetylaminquinoline and hydrochloride (JACOBS and HEIDELBERGER) 1915, 21, 143
 $\text{O}_2\text{N}_2\text{S}$ 2-Thio-4-anisalhydantoin (JOHNSON and O'BRIEN) 1912, 12, 212
 $\text{O}_3\text{N}_2\text{S}$ 1-Phenyl-2-thiohydantoin-4-acetic acid (BRAUT-LECHT) 1911-12, 10, 145
 $\text{O}_2\text{N}_3\text{S}$ 1-Phenyl-2-thiohydantoin-4-acetamide (BRAUT-LECHT) 1911-12, 10, 145
 O_3NBr_2 Phenyl- α , β -dibromopropionylglycocoll (DAKIN) 1908-09, 5, 307
 $\text{O}_5\text{N}_2\text{Cl}$ 2-Acetoxy-5-nitrochloroacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 690
Chloroacetylaminioethyl *m*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 411
Chloroacetylaminioethyl *o*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 410
Chloroacetylaminioethyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 411

- $C_{11}H_{12}ON_2S$ 1-Phenyl-4-ethyl-2-thiohydantoin (BRAUTLECHT)
1911-12, 10, 143
- $C_{11}H_{11}O_2NBr$ 3-Acetamino-4-tolyl bromomethyl ketone (3-acetamino-4-methylphenacyl bromide) (JACOBS and HEIDELBERGER) 1915, 21, 460
- $C_{11}H_{11}O_2NCl$ Chloroacetylaminooethyl benzoate (JACOBS and HEIDELBERGER) 1915, 21, 408
- $C_{11}H_{11}O_2NCl$ Chloroacetylaminomethyl anisate (JACOBS and HEIDELBERGER) 1915, 21, 406
- $C_{11}H_{11}O_2NBr$ Phenyl- α -bromo- β -oxypropionylglycocoll (DAKIN) 1908-09, 5, 307
- $C_{11}H_{11}O_2N_2I$ *p*-Acetaminoiodoacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 687
- $C_{11}H_{11}O_2N_2Cl$ Chloroacetylaminooethyl *p*-aminobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 412
- $C_{11}H_{11}O_6N_3S$ Hydantoic acid, $C_6H_5NHCSNHCH(COOH)CH_2CONH_2$, and potassium salt (BRAUTLECHT)
1911-12, 10, 145
- $C_{11}H_{14}O_2NCl$ Chloroacetylaminooethyl *o*-tolyl ether (JACOBS and HEIDELBERGER) 1915, 21, 416
- α -*p*-Tolyl- α -oxy- β -chloroacetylaminooethane (JACOBS and HEIDELBERGER) 1915, 21, 433
- $C_{11}H_{14}O_2NCl$ 1,2-Dimethylchloroacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 692
- $C_{11}H_{15}O_4N_2Br$ *d*-Lyxose *p*-bromophenylhydrazone (LEVENE and LA FORGE) 1914, 18, 325
- Urine pentose *p*-bromophenylhydrazone (LEVENE and LA FORGE) 1914, 18, 322
- $C_{11}H_{18}O_{13}N_8P_2$ Hexothymidine diphosphoric acid, barium and brucine salts (LEVENE and JACOBS) 1912, 12, 417
- $C_{11}H_{20}O_2N_6Cl$ Chloroacetylurethane and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 152
- $C_{11}H_{21}O_2N_4I$ Carbethoxyethylhexamethylenetetraminium iodide (JACOBS and HEIDENBERGER) 1915, 21, 467
- $C_{11}H_{22}O_2N_6Cl$ Chloroacetylaminoisopropanol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 425
- $C_{11}H_{24}O_2NCl$ Valeryl- α -methylcholine chloride (valeryl- β -methylethoxytrimethylammonium chloride), chloroplatinate, and chloraurate (MENGE) 1912-13, 13, 106

C₁₁ V

- $C_{11}H_{11}O_2NClBr$ Phenyl- α -bromo- β -chloropropionylglycocoll (DAKIN) 1908-09, 5, 308

C₁₁ Group**C₁₁ II**

- O₂** β -Methoxy- α -naphthobenzyl alcohol (JACOBS and HEIDELBERGER) 1915, 20, 674
N₂ *p*-Aminodipropylaniline (JACOBS and HEIDELBERGER) 1915, 21, 116
I Dodecyl iodide (LEVENE and WEST) 1914, 18, 478

C₁₁ III

- OBr** α -Naphthyl bromoethyl ether (α -naphthoxyethyl bromide) (JACOBS and HEIDELBERGER) 1915, 21, 441
ON 2-Oxy-3-methyl-6-methylphenylaminopyrimidine (JOHNSON and CLAPP) 1908-09, 5, 65
O₄Br Bromoethyl acetyl-*p*-cresotinate (JACOBS and HEIDELBERGER) 1915, 21, 452
O₄Cl Chloroacetyloxyethyl anisate (JACOBS and HEIDELBERGER) 1915, 21, 471
O₄N Acetyl-*p*-methylphenylalanine (DAKIN) 1911, 9, 158
O₄N₂ 3-Nitro-4-oxybenzylpiperidine (JACOBS and HEIDELBERGER) 1915, 20, 669
ON₂ 3-Amino-4-oxybenzylpiperidine and hydrochloride (JACOBS and HEIDELBERGER) 1915, 20, 669
p-Nitrosodipropylaniline (JACOBS and HEIDELBERGER) 1915, 21, 115
NO₁₁ Chondrosin (LEVENE and LA FORGE) 1913, 15, 73; 1914, 18, 239
O₄P₁₀ Di-inosite triphosphoric acid ester and pentabarium salt (ANDERSON) 1912, 12, 112

C₁₂ IV

- ONBr** β -(ω -Bromoacetyl)-quinaldine (JACOBS and HEIDELBERGER) 1915, 21, 463
O₂N₂Cl *p*-Nitrobenzylpyridinium chloride (JACOBS and HEIDELBERGER) 1915, 20, 667
O₂N₂S 2-Thio-3-acetyl-4-benzylhydantoin (JOHNSON and O'BRIEN) 1912, 12, 211
O₂N₂S 1-Phenyl-2-thiohydantoin-4-propionic acid (BRAUTLECHT) 1911-12, 10, 146
N₂SI 2-Ethylmercapto-5-iodo-6-anilinopyrimidine (JOHNSON and JOHNS) 1905-06, 1, 314

- C₁₂H₁₃O₅N₂Cl** Chloroacetylaminoisopropyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 425
 γ-Chloroacetylaminopropyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 423
 p-Nitrobenzoylaminoisopropyl chloroacetate (JACOBS and HEIDELBERGER) 1915, 21, 426
 γ-*p*-Nitrobenzoylaminopropyl chloroacetate (JACOBS and HEIDELBERGER) 1915, 21, 422
- C₁₂H₁₄ON₂S** 1-Phenyl-4-isopropyl-2-thiohydantoin (BRAT-LECHT) 1911-12, 10, 144
- C₁₂H₁₄O₂NI** 3-Acetamino-4-tolyl ω-iodoethyl ketone (3-acetamino-4-methyl-ω-iodopropiophenone) (JACOBS and HEIDELBERGER) 1915, 21, 461
- C₁₂H₁₄O₃NCl** Chloroacetylaminoethyl *o*-toluate (JACOBS and HEIDELBERGER) 1915, 21, 409
 Chloroacetylaminoethyl *p*-toluate (JACOBS and HEIDELBERGER) 1915, 21, 409
- C₁₂H₁₄O₃NI** *m*-Iodoacetylaminomethylbenzoic acid ethyl ester (JACOBS and HEIDELBERGER) 1915, 20, 693
- C₁₂H₁₄O₃NCl** Chloroacetylaminoethyl anisate (JACOBS and HEIDELBERGER) 1915, 21, 414
- C₁₂H₁₅O₂N₂Cl** 1-Methyl-2-acetaminochloroacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 688
 1-Methyl-4-acetaminochloroacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 688
- C₁₂H₁₇ON₂Cl** *p*-Chloroacetylaminodiethylaniline (JACOBS and HEIDELBERGER) 1915, 21, 115
- C₁₂H₁₈O₂N₂Cl** Chloroacetyl-*p*-dimethylaminophenylaminoethanol (JACOBS and HEIDELBERGER) 1915, 21, 420
- C₁₂H₂₄ON₆Cl** Chloroacetdiethylamide and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 149
- C₁₂H₂₄O₂N₆Cl** β-Chloroacetylamino-γ-butanol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 429
 δ-Chloroacetylamino-*n*-butanol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 427
 Chloroacetylaminoethyl ethyl ether and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 416

C₁₁ V

- O₂NCIBr** Bromoethyl *m*-chloroacetylaminioethylbenzoate
(JACOBS and HEIDELBERGER) 1915, 21, 452
- O₂NCIBr** α -Bromoisocapronyl- α -methylcholine chloride
(α -bromoisocapronyl- β -methylethoxytrimethylammonium chloride) and chlorplatinate (MENGE)
1912-13, 13, 107

C₁₁ Group**C₁₃ II**

- O₂** Tridecylic acid (LEVENE and WEST) 1914, 18, 465
(LEVENE, WEST, ALLEN, and VAN DER SCHEER)
1915, 23, 73
- I** Tridecylic iodide (LEVENE, WEST, and VAN DER SCHEER) 1915, 20, 528

C₁₃ III

- O₂Cl** 2-Oxy-3-carbomethoxynaphthobenzyl chloride (JACOBS and HEIDELBERGER) 1915, 20, 682
- N₄Cl₂** *o*-Chlorobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 665
p-Chlorobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 665
- O₂N₂** *d*- β -Mannoheptose *p*-nitrophenylhydrazone (PEIRCE) 1915, 23, 333
- ON₂** *o*-Aminophenoxyethylpiperidine and hydrochloride (JACOBS and HEIDELBERGER) 1915, 21, 448
- O₇N₂** *d*- β -Mannoheptonic acid phenylhydrazide (PEIRCE) 1915, 23, 331

C₁₃ IV

- O₂NCI** Chloroacetylaminioethyl cinnamate (JACOBS and HEIDELBERGER) 1915, 21, 415
- O₂N₂S₂** *p*-Ethylxanthogenate-4-benzylhydantoin (JOHNSON and BRAUTLECHT) 1912, 12, 189
- O₂NCI** Chloroacetylaminioethyl acetylsalicylate (JACOBS and HEIDELBERGER) 1915, 21, 414
1,2-Diacetoxychloroacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 691

- C₁₃H₁₆O₅N₂Cl** β -Chloroacetyl-amino- γ -butyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 429
 δ -Chloroacetylaminobutyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 428
 Chloroacetylethylaminoethyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 417
- C₁₃H₁₆ONCl₃** 2,4,6-Trichlorophenoxyethylpiperidine and hydrochloride (JACOBS and HEIDELBERGER) 1915, 21, 443
- C₁₃H₁₇ON₄Br₃** 2-Oxy-3,5-dibromobenzylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 20, 670
- C₁₃H₁₇O₄N₆Cl** 2,4-Dinitrobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 667
- C₁₃H₁₈O₂N₆Cl** *m*-Nitrobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 666
o-Nitrobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 666
p-Nitrobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 666
- C₁₃H₁₈O₃N₆Cl** 2-Oxy-5-nitrobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 671
- C₁₃H₁₈O₄NCl** γ -Chloroacetylaminopropyl anisate (γ -chloroacetylaminopropyl *p*-methoxybenzoate) (JACOBS and HEIDELBERGER) 1915, 21, 423
- C₁₃H₁₈N₄ClBr** *o*-Bromobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 665
p-Bromobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 665
- C₁₃H₁₈N₄BrI** *o*-Iodobenzylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 467
p-Iodobenzylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 20, 665
- C₁₃H₃₀O₂NCl** Benzoyl- α -methylcholine chloride (benzoyl- β -methylethoxytrimethylammonium chloride), chloroplatinate, and chloroaurate (MENGE) 1912-13, 13, 99

- DN_5Cl Chloroacetpiperidide and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 150
- $\text{D}_2\text{N}_5\text{Cl}$ γ -Chloroacetyl-amino- β -methyl- β -butanol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 431
- Chloroacetylaminomethylmethylethyl carbinol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 430
- γ -Chloroacetyl-amino- β -pentanol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 430

C₁₄ Group**C₁₄ II**

- D_4 Undecylmalonic acid (LEVENE, WEST, ALLEN, and VAN DER SCHEER) 1915, 23, 73

C₁₄ III

- D_4N_3 Phenylglyoxylic acid *p*-nitrophenylhydrazone (DAKIN and DUDLEY) 1913, 15, 139
- D_4N_2 3-Nitro-4-acetoxybenzylpiperidine and hydrochloride (JACOBS and HEIDELBERGER) 1915, 20, 669
- N_5Cl *o*-Cyanobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 666
- p*-Cyanobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 666
- V_4Cl *m*-Methylbenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 663
- o*-Methylbenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 663
- p*-Methylbenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 663
- V_4I Phenylethylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) 1915, 21, 467

C₁₄ IV

- DN_5Cl *p*-Chloroacetylaminobenzene (JACOBS and HEIDELBERGER) 1915, 21, 117
- $\text{D}_2\text{N}_5\text{Cl}$ Benzeneazo-*m*-chloroacetylaminophenol (JACOBS and HEIDELBERGER) 1915, 21, 133
- $\text{D}_3\text{N}_2\text{Hg}$ 4-*p*-Oxybenzeneazophenylmercuric acetate (JACOBS and HEIDELBERGER) 1915, 20, 516

- C₁₄H₁₂O₄N₂Hg** 4-*o*,*p*-Dioxybenzeneazophenylmercuric acetate (JACOBS and HEIDELBERGER) 1915, 20, 517
- C₁₄H₁₈ONBr₂** Tribromo-*p*-methylphenoxyethylpiperidine (JACOBS and HEIDELBERGER) 1915, 21, 445
- C₁₄H₁₈O₃N₅Br** *m*-Nitrophenacylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 459
- C₁₄H₁₈O₄N₅Br** *o*-Nitrophenyl bromoacetate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 470
- C₁₄H₁₉ON₅Cl₂** Chloroacetyl-*o*-chloroaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 110
- C₁₄H₁₉O₂N₄Cl** 3-Aldehyde-4-oxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 683
- 3,4-Methylenedioxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 677
- C₁₄H₁₉O₂N₄Br** Phenylbromoacetate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 469
- C₁₄H₁₉O₃N₄Cl** 3-Carboxy-4-oxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 681
- C₁₄H₁₉O₃N₆Cl** *m*-Nitrochloroacetylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 112
- C₁₄H₂₀ON₄Br₂** *p*-Bromophenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 444
- C₁₄H₂₀ON₅Cl** *p*-Aminophenacylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 21, 460
- Chloroacetylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 104
- C₁₄H₂₀ON₅Br** ω -Bromoacetophenoneoxime and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 456
- Bromoacetylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 104
- C₁₄H₂₀O₂N₅Cl** *m*-Chloroacetylaminophenol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 133
- o*-Chloroacetylaminophenol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 131

- I₂₀O₃N₅Cl** 2-Methoxy-5-nitrobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)
1915, 20, 676
- 3-Nitro-4-methoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)
1915, 20, 676
- I₂₀O₅N₃Cl** Chloroacetylaminooethyl *p*-nitrobenzoate and trimethylamine (JACOBS and HEIDELBERGER)
1915, 21, 412
- I₂₁ON₂Cl** *p*-Chloroacetylaminodipropylaniline (JACOBS and HEIDELBERGER)
1915, 21, 116
- I₂₁ON₄Br** Phenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER)
1915, 21, 440
- I₂₁ON₄Cl** *o*-Methoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)
1915, 20, 673
- p*-Methoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)
1915, 20, 673
- I₂₂O₂NCI** Phenylacetyl- γ -homocholine chloride, chloroplatinate, and chloroaurate (MENGE)
1912-13, 13, 104
- Phenylacetyl- α -methylcholine chloride (phenylacetyl- β -methylethoxytrimethylammonium chloride), chloroplatinate, and chloroaurate (MENGE)
1912-13, 13, 101
- Phenylacetyl- β -methylcholine chloride (phenylacetyl- β -oxypropyltrimethylammonium chloride), chloroplatinate, and chloroaurate (MENGE)
1912-13, 13, 102

C₁₄ V

- I₁₉ON₅ClBr** *p*-Bromochloroacetylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 110
- I₁₉ON₅ClI** *m*-Iodochloroacetylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 111

C₁₅ Group**C₁₅ II**

- I₁₂O₅** Baptisol (CLARK) 1915, 21, 650

C₁₅ III

- C₁₅H₁₄O₅N₆** Glyceric aldehyde *p*-nitrophenylhydrazone (DAKIN and DUDLEY) 1913, 15, 138
C₁₅H₁₈O₃N₂ Diazobenzalglucosaminic acid ethyl ester (LEVENE and LA FORGE) 1915, 21, 349
C₁₅H₂₃N₄Cl 3,5-Dimethylbenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 663

C₁₅ IV

- C₁₅H₁₁O₃N₂Cl** *o*-Chloroacetylaminophenyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 132
C₁₅H₁₂O₃NCl *o*-Chloroacetylaminophenyl benzoate (JACOBS and HEIDELBERGER) 1915, 21, 131
C₁₅H₁₃O₃NHg 4-*o*-Oxybenzylideneaminophenylmercuricacetate (JACOBS and HEIDELBERGER) 1915, 20, 518
C₁₅H₁₄O₅NCl β -Acetoxy- α -chloroacetylnaphthobenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 689
 Chloroacetylaminooethyl β -naphthoate (JACOBS and HEIDELBERGER) 1915, 21, 410
C₁₅H₁₄O₃NI β -Acetoxy- α -iodoacetylnaphthobenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 689
C₁₅H₁₄O₃N₂Hg 3-Methyl-4-*p*-oxybenzeneazophenylmercuric acetate (JACOBS and HEIDELBERGER) 1915, 20, 520
C₁₅H₁₅ON₂Cl β -Chloroacetyl- α,α -phenylbenzylhydrazine (JACOBS and HEIDELBERGER) 1915, 21, 474
C₁₅H₁₉O₂N₄Br₃ 2-Acetoxy-3,5-dibromobenzylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 20, 671
 4-Acetoxy-3,5-dibromobenzylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 20, 671
C₁₅H₂₀ON₄Br₄ Tribromo-*p*-methylphenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 445
C₁₅H₂₀O₄N₅Br *p*-Nitrobenzoyloxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 450
C₁₅H₂₀O₄N₅I 3-Nitro-4-acetoxybenzylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) 1915, 20, 673
p-Nitrobenzoyloxyethylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) 1915, 21, 451

- H₂₁ON₄Br** *p*-Methylphenacylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 456
- H₂₁ON₄I** *p*-Methylphenacylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) 1915, 21, 457
- H₂₁O₂N₄Br** Benzoyloxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 450
- p*-Methoxyphenacylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 462
- H₂₁O₃N₂Cl** Diethylaminoethyl *p*-chloroacetylaminobenzoate (chloroacetyl novocain) (JACOBS and HEIDELBERGER) 1915, 21, 139
- H₂₁O₃N₄Cl** 3-Carbomethoxy-4-oxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 681
- 2-Methoxy-5-carboxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 682
- 2-Oxy-3-carboxy-5-methylbenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 681
- 2-Oxy-3-methoxy-5-aldehydobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 683
- H₂₁O₃N₆Cl** *m*-Nitrochloroacetyl-*p*-toluidine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 112
- H₂₂ON₆Cl** *o*-Acetaminobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 668
- p*-Acetaminobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 668
- Chloroacetylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 686
- Chloroacetylmethylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 105
- Chloroacetyl-*m*-toluidine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 108

C₁₅H₂₂ON₅Cl—*continued*:

Chloroacetyl-*o*-toluidine and hexamethylenetetramine (JACOBS and HEIDELBERGER)

1915, 21, 107

Chloroacetyl-*p*-toluidine and hexamethylenetetramine (JACOBS and HEIDELBERGER)

1915, 21, 108

C₁₅H₂₂O₂N₅Cl *o*-Chloroacetylaminobenzyl alcohol and hexamethylenetetramine (JACOBS and HEIDELBERGER)

1915, 21, 138

Chloroacetyl-*o*-anisidine and hexamethylenetetramine (JACOBS and HEIDELBERGER)

1915, 21, 135

Chloroacetyl-*p*-anisidine and hexamethylenetetramine (JACOBS and HEIDELBERGER)

1915, 21, 138

C₁₅H₂₂O₄N₅Cl 2-Nitro-3,4-dimethoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)

1915, 20, 679

C₁₅H₂₂O₂NCl Monobenzalglucosaminic acid ethyl ester hydrochloride (LEVENE and LA FORGE)

1915, 21, 348

C₁₅H₂₃ON₄Cl *o*-Ethoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)

1915, 20, 677

C₁₅H₂₃ON₄Br *m*-Methylphenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER)

1915, 21, 441

o-Methylphenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER)

1915, 21, 440

p-Methylphenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER)

1915, 21, 441

C₁₅H₂₃O₂N₄Cl 2,3-Dimethoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)

1915, 20, 678

3,4-Dimethoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)

1915, 20, 678

C₁₅ V

C₁₅H₂₁ON₅ClI 5-Iodochloroacetyl-*o*-toluidine and hexamethylenetetramine (JACOBS and HEIDELBERGER)

1915, 21, 112

C₁₆ Group

- 1 Hexadecane (LEVENE, WEST, and VAN DER SCHEER)
1915, 20, 523

C₁₆ II

- N₄ *p*-Aminobenzeneazodiethylaniline (JACOBS and HEIDELBERGER)
1915, 21, 123

C₁₆ III

- O₄N₂ 1-Phenyl-4-*p*-nitrobenzalhydantoin (JOHNSON and BRAUTLECHT)
1912, 12, 184
O₂N₂ 1-Phenyl-4-*p*-aminobenzalhydantoin, hydrochloride, hydriodide, nitrate, and sulfate (JOHNSON and BRAUTLECHT)
1912, 12, 184
O₄N₂ Salicylamide ethylene ether (JACOBS and HEIDELBERGER)
1915, 21, 449

C₁₆ IV

- O₄N₂S 1-Phenyl-2-thio-4-*p*-nitrobenzalhydantoin (JOHNSON and BRAUTLECHT)
1912, 12, 182
ON₂S 1-Phenyl-4-benzyl-2-thiohydantoin (BRAUTLECHT)
1911-12, 10, 144
O₂NCI Chloroacetyl- ω -anilinoacetophenone (JACOBS and HEIDELBERGER)
1915, 21, 106
O₂N₂S 1-Phenyl-4-*p*-hydroxybenzyl-2-thiohydantoin (BRAUTLECHT)
1911-12, 10, 144
O₂NCI α -Chloroacetylaminobenzyl benzoate (JACOBS and HEIDELBERGER)
1915, 21, 139
O₂N₂Cl Chloroacetylphenylglycineanilide (JACOBS and HEIDELBERGER)
1915, 21, 106
ON₃Cl Chloroacetylaminoozotoluene (*o*-tolueneazochloroacetyl-*o*-toluidine) (JACOBS and HEIDELBERGER)
1915, 21, 118
O₂NCI α,β -Diphenylchloroacetylamin ethanol (JACOBS and HEIDELBERGER)
1915, 21, 434
 α,β -Isodiphenylchloroacetylamin ethanol (JACOBS and HEIDELBERGER)
1915, 21, 435
O₂N₂Cl 4-Nitrobenzeneazo-2'-chloroacetyl amino-4'-dimethylaminobenzene (JACOBS and HEIDELBERGER)
1915, 21, 129
ON₄Cl Benzeneazo-2'-chloroacetyl amino-4'-dimethylaminobenzene (JACOBS and HEIDELBERGER)
1915, 21, 128
p-Chloroacetylaminobenzeneazodimethylaniline (JACOBS and HEIDELBERGER)
1915, 21, 122

- C₁₆H₁₇O₂N₃Hg** 4-*p*-Dimethylaminobenzeneazophenylmercuric acetate (JACOBS and HEIDELBERGER) 1915, 20, 516
- C₁₆H₂₂O₂N₅Cl** ω -Chloroacetylaminacetophenone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 472
- C₁₆H₂₂O₂N₅Br** *p*-Acetaminophenacylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 460
- C₁₆H₂₃ON₄Br** *p*-Ethylphenacylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 459
- m*-Xylyl bromomethyl ketone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 458
- o*-Xylyl bromomethyl ketone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 458
- C₁₆H₂₃O₂N₄Br** *p*-Ethoxyphenacylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 463
- C₁₆H₂₃O₂N₅Cl** *m*-Chloroacetylaminacetophenone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 141
- C₁₆H₂₃O₂N₆Cl** β -Acetyl- α -chloroacetyl- α -phenylhydrazine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 474
- m*-Chloroacetylaminomethylbenzamide and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 694
- Chloroacetylbenzylurea and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 152
- C₁₆H₂₃O₃N₂Cl** *m*-Chloroacetylaminomethylbenzoic acid diethylaminoethyl ester (JACOBS and HEIDELBERGER) 1915, 20, 693
- C₁₆H₂₃O₃N₄Cl** 2-Methoxy-5-carbomethoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 683
- C₁₆H₂₄ON₅Cl** Chloroacetyl-*o*-methylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 686
- Chloroacetyl-*m*-4-xylylidine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 109

- $C_{16}H_{24}O_2N_3Cl$ α -Phenyl- α -oxy- β -chloroacetylaminooethane and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 432
- $C_{16}H_{24}O_2N_3Br$ *o*-Acetaminophenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 448
- p*-Acetaminophenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 446
- $C_{16}H_{24}O_2N_3I$ β -Iodopropionyl-*o*-anisidine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 136
- $C_{16}H_{25}ON_3Cl$ *m*-Chloroacetylaminodimethylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 113
- p*-Chloroacetylaminodimethylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 114
- $C_{16}H_{25}O_2N_4Cl$ 3-Methoxy-4-ethoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 680
- $C_{16}H_{33}O_3N_4S$ Kyrine sulfate (LEVENE and VAN DER SCHEER) 1915, 22, 427

C₁₇ Group**C₁₇ II**

- $C_{17}H_{16}N_3$ *o*-Tolueneazo- α -naphthylamine (JACOBS and HEIDELBERGER) 1915, 21, 121
- $C_{17}H_{24}O_{10}$ Cornin (MILLER) 1909-10, 7, xliii
- $C_{17}H_{34}O_2$ Methyl α -hydroxypalmitate (LEVENE and WEST) 1914, 18, 466
- $C_{17}H_{35}N$ Sphingamine (LEVENE and JACOBS) 1912, 11, 553

C₁₇ III

- $C_{17}H_{13}O_2N$ α -Benzoylamino-*p*-methylcinnamic acid anhydride (DAKIN) 1911, 9, 154
- $C_{17}H_{13}O_2N_2$ Isobutylglyoxal semicarbazone (DAKIN and DUDLEY) 1914, 18, 38
- $C_{17}H_{13}O_3N$ Benzoylamino-*p*-methoxycinnamic acid anhydride (DAKIN) 1910-11, 8, 18
- $C_{17}H_{15}O_2N$ α -Benzoylamino-*p*-methylcinnamic acid (DAKIN) 1911, 9, 155
- $C_{17}H_{15}O_4N$ Benzoylamino-*p*-methoxycinnamic acid (DAKIN) 1910-11, 8, 19

- $C_{17}H_{17}O_4N$ Benzoyltyrosine methyl ether (DAKIN) 1910-11, 8, 19
- $C_{17}H_{19}O_3N$ Morphine, picrolonate (WARREN and WEISS) 1907, 3, 336
- $C_{17}H_{20}O_3N_4$ Urine pentose osazone (LEVENE and LA FORGE) 1913, 15, 484
- $C_{17}H_{21}N_4Cl$ β -Naphthobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 664
- $C_{17}H_{23}O_3N$ Atropine, picrolonate (WARREN and WEISS) 1907, 3, 336
- $C_{17}H_{27}O_2N_3$ Methyl *n*-nonyl ketone *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 224
- $C_{17}H_{35}O_2N$ Sphingosine, sulfate, diacetate (LEVENE and JACOBS) 1912, 11, 548
- , picrolonate (LEVENE and WEST) 1916, 24, 64
- $C_{17}H_{37}O_2N$ Dihydrosphingosine, sulfate (LEVENE and JACOBS) 1912, 11, 550
- , picrate, picrolonate (LEVENE and WEST) 1916, 24, 66

C₁₇ IV

- $C_{17}H_{14}O_3N_2S$ Benzoylbenzalthiohydantoic acid and sodium salt (JOHNSON and O'BRIEN) 1912, 12, 210
- $C_{17}H_{15}O_5N_2Cl$ Chloroacetylphenylaminoethyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 418
- $C_{17}H_{16}O_2NBr$ Bromoacetyl- ω -*o*-toluidinoacetophenone (JACOBS and HEIDELBERGER) 1915, 21, 107
- $C_{17}H_{16}O_3NCl$ Chloroacetyl- ω -*o*-anisidinoacetophenone (JACOBS and HEIDELBERGER) 1915, 21, 137
- $C_{17}H_{19}ON_2Cl$ *p*-Chloroacetylaminioethylbenzylaniline (JACOBS and HEIDELBERGER) 1915, 21, 117
- $C_{17}H_{21}ON_6Cl$ 6-Chloroacetylaminioquinoline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 143
- $C_{17}H_{23}O_2N_4Br_3$ 2-Acetoxy-3,5-dimethyl-4,6-dibromobenzylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 20, 671
- $C_{17}H_{23}O_5N_6Cl$ Chloroacetylaminioethyl *m*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 411
- Chloroacetylaminioethyl *o*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 410
- Chloroacetylaminioethyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 412

- C₁₇H₂₄O₂N₅Br** 3-Acetamino-4-methylphenacylhexamethylene-tetraminium bromide (JACOBS and HEIDELBERGER)
1915, 21, 461
- C₁₇H₂₄O₃N₅Cl** Ethyl *p*-chloroacetylaminobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 139
- Chloroacetylaminooethyl benzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 408
- C₁₇H₂₅O₂N₄Cl** 2-Acetoxy-3,5-dimethylbenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)
1915, 20, 670
- C₁₇H₂₅O₂N₅I** *p*-Acetaminoiodoacetylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 20, 687
- C₁₇H₂₅ON₅Cl** Chloroacetyl- ψ -cumidine and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 109
- C₁₇H₂₅O₂N₅Cl** Chloroacetyl amino *o*-tolyl ether and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 417
- β -Phenyl- β -oxy- α -chloroacetylaminopropane and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 436
- C₁₇H₂₅O₃N₅Cl** 1,2-Dimethoxychloroacetylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 20, 692

C₁₈ Group

- C₁₈H₃₈** Octadecane (LEVENE, WEST, and VAN DER SCHEER)
1915, 20, 524

C₁₈ II

- C₁₈H₃₄O₆** Ethylene anisate (JACOBS and HEIDELBERGER)
1915, 21, 471
- C₁₈H₃₄O₄** Ethyl undecylmalonate (LEVENE, WEST, ALLEN, and VAN DER SCHEER)
1915, 23, 73
- C₁₈H₃₆O₂** Ethyl α -hydroxypalmitate (LEVENE and WEST)
1914, 18, 466

C₁₈ III

- C₁₈H₂₀O₄N₆** Isobutylglyoxal dinitrophenylhydrazone (DAKIN and DUDLEY)
1914, 18, 39
- C₁₈H₂₁O₃N** Codeine, picrate (WARREN and WEISS)
1907, 3, 336

- $C_{18}H_{22}ON_4$ *p*-Acetaminobenzeneazodiethylaniline (JACOBS and HEIDELBERGER) 1915, 21, 123
 $C_{18}H_{24}O_4N_4$ Deaminochondrosamine phenylosazone (LEVENE and LA FORGE) 1914, 18, 127

C₁₈ IV

- $C_{18}H_{13}O_2N_2Cl$ Benzeneazo- β -naphthyl chloroacetate (JACOBS and HEIDELBERGER) 1915, 21, 470
 $C_{18}H_{15}O_3N_3S$ 1-Phenyl-2-ethylmercapto-4-*p*-nitrobenzalhydantoin (JOHNSON and BRAUTLECHT) 1912, 12, 183
 $C_{18}H_{17}O_5N_4Br_2$ Glucuronic acid *p*-bromophenylhydrazone (LEVENE and LA FORGE) 1913, 15, 76
 $C_{18}H_{20}O_4N_2S_2$ Thiotyrosine disulfide (JOHNSON and BRAUTLECHT) 1912, 12, 190
 $C_{18}H_{21}ON_4Cl$ *p*-Chloroacetylaminobenzeneazodiethylaniline (JACOBS and HEIDELBERGER) 1915, 21, 124
 $C_{18}H_{21}ON_4Br$ *p*-Acetaminobenzeneazo-2'-bromo-4'-diethylaminobenzene (JACOBS and HEIDELBERGER) 1915, 21, 128
 $C_{18}H_{21}O_2N_3Hg$ 4-*p*-Diethylaminobenzeneazophenylmercuric acetate (JACOBS and HEIDELBERGER) 1915, 20, 516
 $C_{18}H_{22}ON_6Cl$ Chloroacetyl- α -naphthylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 109
 Chloroacetyl- β -naphthylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 109
 $C_{18}H_{22}ON_6Br$ β -(ω -Bromoacetyl)-quinaldine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 464
 $C_{18}H_{23}ON_4Cl$ β -Methoxy- α -naphthobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 674
 $C_{18}H_{23}ON_6Br$ α -Naphthoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 442
 β -Naphthoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 442
 $C_{18}H_{25}O_5N_4Cl$ Chloroacetyloxyethyl anisate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 471
 $C_{18}H_{25}O_5N_6Cl$ Chloroacetylaminoisopropyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 425
 γ -Chloroacetylaminopropyl *p*-nitrobenzoate and

$_{15}O_6N_6Cl$ —continued:

- hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 423
p-Nitrobenzoylaminoisopropyl chloroacetate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 427
 $_{26}O_2N_5I$ 3-Acetamino-4-tolyl ω -iodoethyl ketone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 462
 $_{26}O_2N_5Cl$ *m*-Carbethoxychloroacetylbenzylamine (ethyl *m*-chloroacetylaminomethylbenzoate) (JACOBS and HEIDELBERGER) 1915, 20, 692
 Chloroacetylaminioethyl *o*-toluate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 409
 Chloroacetylaminioethyl *p*-toluate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1905, 21, 409
 $_{26}O_4N_5Cl$ Chloroacetylaminioethyl anisate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 415
 $_{27}O_2N_6Cl$ 1-Methyl-4-acetaminochloroacetylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 688
 $_{27}O_{17}NS$ Chondroitin sulfuric acid (LEVENE and LA FORGE) 1913, 15, 72
 $_{29}ON_6Cl$ *p*-Chloroacetylaminodiethylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 115
 $_{31}O_2N_4Br$ Bornyl bromoacetate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 468
 $_{33}O_2N_4Br$ Menthyl bromoacetate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 468

 C_{18} V

- $_{15}O_2N_3SHg$ 1-Amino-2-(*p*-naphthaleneazophenylmercuric acetate)-5-sulfonic acid (JACOBS and HEIDELBERGER) 1915, 20, 517

 C_{19} Group **C_{19} III**

- $_{39}O_2N$ Dimethylsphingosine (LEVENE and JACOBS) 1912, 11, 552

C₁₉ IV

- C₁₉H₂₃O₃N₄Cl 2-Oxy-3-carbomethoxynaphthobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 683
- C₁₉H₂₁ON₃Cl Chloroacetylbis-(*p*-dimethylaminophenyl)-meth-ylamine (chloroacetylleucoauramine) (JACOBS and HEIDELBERGER) 1915, 21, 472
- C₁₉H₂₆O₅N₆Cl Chloroacetylaminoethyl acetylsalicylate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 414,
1,2-Diacetoxychloroacetylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 692
- C₁₉H₂₆O₁₅N₅P₂ Guanine-cytosine dinucleotide (JONES and RICHARDS) 1915, 20, 30
- C₁₉H₂₇O₅N₆Cl β-Chloroacetyl-amino-γ-butyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 429
δ-Chloroacetylaminobutyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 428
Chloroacetylethylaminoethyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 411
- C₁₉H₂₉O₃N₆Cl 1-Acetamino-4-ethoxychloroacetylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 69
- C₁₉H₃₀O₄N₅Cl γ-Chloroacetylaminopropyl anisate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 41

C₂₀ Group

- C₂₀H₄₂ Eicosane (LEVENE, WEST, and VAN DER SCHEER) 1915, 20, 5

C₂₀ II

- C₂₀H₃₀N₂ Benzylphenylhydrazine derivative of reducing component of yeast nucleic acid (Boos) 1908-09, 5, 4
- C₂₀H₂₂N₄ *p*-Diethylaminobenzeneazo-β-naphthylamine (JACOBS and HEIDELBERGER) 1915, 21, 1
- C₂₀H₃₈O₄ α-Acetoxystearic acid (LEVENE and WEST) 1914, 16, 4
- C₂₀H₄₁I Eicosyl iodide (LEVENE, WEST, and VAN DER SCHEER) 1915, 20, 5

C₂₀ III

- ¹⁶O₄N₆** Phenylglyoxal di-*p*-nitrophenylhydrazone (DAKIN and DUDLEY) 1913, 15, 138
- ¹⁴O₂N₂** Quinine, picrolonate (WARREN and WEISS) 1907, 3, 337
- ¹⁶ON₄** *p*-Acetaminobenzeneazodipropylaniline (JACOBS and HEIDELBERGER) 1915, 21, 124
- ³²N₈Cl₂** *m*-Xylylenediexamethylenetetraminium dichloride (JACOBS and HEIDELBERGER) 1915, 20, 664
- o*-Xylylenediexamethylenetetraminium dichloride (JACOBS and HEIDELBERGER) 1915, 20, 663
- ⁵⁶O₄₉P₆** Acid from wheat bran, barium and brucine salts (ANDERSON) 1912, 12, 457

C₂₀ IV

- ¹⁸O₄N₄S₂** Tyrosine disulfide hydantoin (JOHNSON and BRAUTLECHT) 1912, 12, 194
- ¹⁴ON₆Cl** Chloroacetyldiphenylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 105
- ¹⁴ON₇Cl** *p*-Chloroacetylaminobenzene and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 118
- ¹⁴O₂N₇Cl** Benzeneazo-*m*-chloroacetylaminophenol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 134
- ¹⁶ON₄Cl** *p*-Chloroacetylaminobenzeneazodipropylaniline (JACOBS and HEIDELBERGER) 1915, 21, 125
- ¹⁶O₂N₅Cl** β -Methoxy- α -chloroacetylnaphthobenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 690
- ³³ON₆Cl** *p*-Chloroacetylaminodipropylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 116

C₂₁ Group**C₂₁ II**

- ¹⁸O₈** Triacetyl baptisol (CLARK) 1915, 21, 654
- ¹⁷O₂₀** Algin (alginic acid) (HOAGLAND and LIEB) 1915, 23, 290

C₂₁ III

- ¹⁸O₄N₆** Benzylglyoxal di-*p*-nitrophenylhydrazone (DAKIN and DUDLEY) 1914, 18, 43

- $C_{21}H_{21}O_5N$ Hydrastine, picrolonate (WARREN and WEISS) 1907, 3, 337
 $C_{21}H_{22}O_2N_2$ Strychnine, picrolonate (WARREN and WEISS) 1907, 3, 334
 $C_{21}H_{34}N_8Cl_2$ Mesityldihexamethylenetetraminium dichloride (JACOBS and HEIDELBERGER) 1915, 20, 664
 $C_{21}H_{33}O_4N$ Diacetylsphingosine (LEVENE and JACOBS) 1912, 11, 551

C₂₁ IV

- $C_{21}H_{18}ONCl$ Chloroacetyltriphenylmethylamine (JACOBS and HEIDELBERGER) 1915, 21, 473
 $C_{21}H_{23}O_5N_6Cl$ *o*-Chloroacetylaminophenyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 132
 $C_{21}H_{24}O_3N_6Cl$ *o*-Chloroacetylaminophenyl benzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 131
 $C_{21}H_{25}O_5N_4Cl$ Chloroacetylaminoethyl *p*-(azodiethylaniline)-benzoate (chloroacetylaminoethyl ester of *p*-carboxybenzeneazo-*p'*-diethylaminobenzene) (JACOBS and HEIDELBERGER) 1915, 21, 413
 $C_{21}H_{26}O_3N_6Cl$ β -Acetoxy- α -chloroacetylnaphthobenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 689
 Chloroacetylaminoethyl β -naphthoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 410
 $C_{21}H_{26}O_3N_5I$ β -Acetoxy- α -iodoacetylnaphthobenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 690
 $C_{21}H_{27}ON_6Cl$ β -Chloroacetyl- α,α -phenylbenzylhydrazine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 475
 $C_{21}H_{33}O_3N_6Cl$ Diethylaminoethyl *p*-chloroacetylaminobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 140

C₂₂ Group

- $C_{22}H_{46}$ Docosane (LEVENE, WEST, and VAN DER SCHEER) 1915, 20, 528

C₂₂ III

- $C_{22}H_{45}N_4I$ Cetylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) 1915, 21, 466

C₂₂ IV

- H₁₆O₃N₃Cl** β -Naphthaleneazochloroacetyl- β -naphthylamine
(JACOBS and HEIDELBERGER) 1915, 21, 119
- H₂₃O₃N₄Cl** *p*-Diethylaminobenzeneazochloroacetyl- α -naphthylamine (JACOBS and HEIDELBERGER)
1915, 21, 130
- H₂₆O₂N₅Cl** Chloroacetyl- ω -anilinoacetophenone and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 107
- H₂₆O₂N₅Cl** *o*-Chloroacetylaminobenzyl benzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 139
- H₂₆O₆NCl** Dibenzalxylohexosaminic acid ester hydrochloride
(LEVENE and LA FORGE) 1915, 21, 356
- H₂₇O₂N₆Cl** Chloroacetylphenylglycineanilide and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 106
- H₂₈O₃N₇Cl** Chloroacetylaminooztoluene and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 118
- H₂₈O₂N₅Cl** α , β -Diphenylchloroacetylaminooethanol and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 434
- α , β -Isodiphenylchloroacetylaminooethanol and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 435
- I₂₉O₃N₅Cl** *p*-Chloroacetylaminobenzeneazodimethylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 123
- I₃₅O₅N₆Cl** *m*-Chloroacetylaminomethylbenzoic acid diethylaminoethyl ester and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 20, 694
- I₄₆O₂NCl** Palmityl- α -methylcholine chloride (palmityl- β -methylethoxytrimethylammonium chloride) (MENGE)
1912-13, 13, 108

C₂₁ Group**C₂₃ III**

- I₂₁O₃N** α -Phenyl- α -benzoyloxy- β -benzoylaminopropane
(JACOBS and HEIDELBERGER) 1915, 21, 436
- I₂₄O₃N₄** *p*-Acetaminobenzeneazoethylbenzylaniline (JACOBS and HEIDELBERGER) 1915, 21, 126
- I₂₆O₄N₂** Brucine, picrolonate (WARREN and WEISS)
1907, 3, 335
- I₄₁O₅N** Triacetylshingosine (LEVENE and JACOBS)
1912, 11, 551

C₂₃ IV

- C₂₃H₂₃ON₄Cl** *p*-Chloroacetylaminobenzeneazoethylbenzylaniline (JACOBS and HEIDELBERGER) 1915, 21, 126
- C₂₃H₂₇O₅N₆Cl** Chloroacetylphenylaminoethyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 419
- C₂₃H₂₈O₂N₅Br** Bromoacetyl- ω -*o*-toluidinoacetophenone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 107
- C₂₃H₂₈O₃N₅Cl** Chloroacetyl- ω -*o*-anisidinoacetophenone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 137
- C₂₃H₃₁ON₆Cl** *p*-Chloroacetylaminooethylbenzylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 117

C₂₄ Group

- C₂₄H₅₀** Isotetracosane from lignoceric acid (LEVENE and WEST) 1913, 14, 265; 1914, 18, 480
- n*-Tetracosane (LEVENE and WEST) 1914, 18, 478

C₂₄ II

- C₂₄H₂₁N₅** *o*-Tolueneazo-*o*-tolueneazo- β -naphthylamine (JACOBS and HEIDELBERGER) 1915, 21, 120
- C₂₄H₄₈O₂** Carnaubic acid (DUNHAM) 1908, 4, 297
- Lignoceric acid (LEVENE and JACOBS) 1912, 12, 385
- (LEVENE and WEST) 1913, 14, 263
- (LEVENE) 1913, 15, 363
- Tetracosanic acid (LEVENE, WEST, ALLEN, and VAN DER SCHEER) 1915, 23, 75
- C₂₄H₄₉I** Isotetracosyl iodide (LEVENE and WEST) 1914, 18, 480
- C₂₄H₅₀O** Isotetracosyl alcohol (LEVENE and WEST) 1914, 18, 479

C₂₄ III

- C₂₄H₂₆O₄N₆** Glucuronic acid osazone hydrazide (LEVENE and LA FORGE) 1913, 15, 75; 1914, 18, 240

C₂₄ IV

- C₂₄H₁₈ON₅Cl** Benzeneazobenzeneazochloroacetyl- β -naphthylamine (JACOBS and HEIDELBERGER) 1915, 21, 119

C₁₄H₂₃ON₅Cl *p*-Chloroacetylaminobenzeneazodiethylaniline
and hexamethylenetetramine (JACOBS and HEIDEL-
BERGER) 1915, 21, 124

C₂₅ Group

C₂₅H₅₂ Pentacosane from cerebronic acid (LEVENE and JACOBS)
1912, 12, 386
(LEVENE and WEST) 1913, 14, 264

C₂₅ II

C₂₅H₄₈O₄ Docosylmalonic acid (LEVENE, WEST, ALLEN, and
VAN DER SCHEER) 1915, 23, 74

C₂₅H₅₀O₃ Cerebronic acid (LEVENE and JACOBS)
1912, 12, 382
(LEVENE and WEST) 1913, 14, 258

C₂₅ IV

C₂₅H₂₈ON₃Cl *p*-Chloroacetylaminoleucomalachite green (JA-
COBS and HEIDELBERGER) 1915, 21, 141

C₂₅H₃₆ON₇Cl Chloroacetylleucoauramine and hexamethylene-
tetramine (JACOBS and HEIDELBERGER)
1915, 21, 473

C₂₅H₅₅O₁₄P₃Ba₅ Barium salt of wheat bran acid (ANDERSON)
1912, 12, 455

C₂₆ Group

C₂₆H₅₄ Isohexacosane (cerane) (LEVENE, WEST, and VAN DER
SCHEER) 1915, 20, 533
Hexacosane (LEVENE, WEST, and VAN DER SCHEER)
1915, 20, 529

C₂₆ II

C₂₆H₅₂O₂ Ethyl carnaubate (DUNHAM) 1908, 4, 299
Ethyl lignocerate (LEVENE) 1913, 15, 362
(LEVENE and WEST) 1913, 15, 193

Ethyl tetracosanate (LEVENE, WEST, ALLEN, and
VAN DER SCHEER) 1915, 23, 75

C₂₆H₅₂O₃ Methyl cerebrionate (LEVENE and WEST)
1913, 14, 261

C₂₆ IV

C₂₆H₂₂ON₅Cl *o*-Tolueneazo-*o*-tolueneazochloroacetyl- β -naph-
thylamine (JACOBS and HEIDELBERGER)
1915, 21, 120

- $C_{28}H_{37}ON_8Cl$ *p*-Chloroacetylaminobenzeneazodipropylaniline
and hexamethylenetetramine (JACOBS and HEIDEL-
BERGER) 1915, 21, 125

C₂₇ Group**C₂₇ II**

- $C_{27}H_{21}N_5$ *o*-Tolueneazo- α -naphthaleneazo- β -naphthylamine
(JACOBS and HEIDELBERGER) 1915, 21, 121
 $C_{27}H_{53}O_4$ Acetylcerebronic acid (LEVENE and WEST) 1913, 14, 262
 $C_{27}H_{54}O_3$ Ethyl cerebrionate (LEVENE and WEST) 1913, 14, 260

C₂₇ IV

- $C_{27}H_{30}ON_6Cl$ Chloroacetyltriphenylmethylamine and hexameth-
ylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 474
 $C_{27}H_{37}O_2N_8Cl$ Chloroacetylaminoethyl *p*-(azodiethylaniline)-
benzoate and hexamethylenetetramine (JACOBS and
HEIDELBERGER) 1915, 21, 413

C₂₈ Group

- $C_{28}H_{58}$ Octacosane (LEVENE, WEST, and VAN DER SCHEER)
1915, 20, 529

C₂₉ Group**C₂₉ II**

- $C_{29}H_{56}O_4$ Acetate of ethyl cerebrionate (LEVENE and WEST) 1913, 14, 261
Ethyl docosylmalonate (LEVENE, WEST, ALLEN, and
VAN DER SCHEER) 1915, 23, 74

C₂₉ IV

- $C_{29}H_{35}ON_8Cl$ *p*-Chloroacetylaminobenzeneazoethylbenzylani-
line and hexamethylenetetramine (JACOBS and HEI-
DELBERGER) 1915, 21, 127

C₃₀ Group

- $C_{30}H_{62}$ Isotriacontane (melissane) (LEVENE, WEST, and VAN
DER SCHEER) 1915, 20, 534
Triacontane (LEVENE, WEST, and VAN DER SCHEER)
1915, 20, 530

C₃₀ II

- ¹⁴O₆ Isomannid dilaurate (BLOOR) 1912, 11, 423
¹⁶O₇ Mannite dilaurate (BLOOR) 1912, 11, 421

C₃₁ Group**C₃₁ IV**

- ¹⁰ON₇Cl *p*-Chloroacetylaminoleucomalachite green and
 hexamethylenetetramine (JACOBS and HEIDELBER-
 GER) 1915, 21, 141

C₃₂ Group

- ¹⁶ Dotriacontane (LEVENE, WEST, and VAN DER SCHEER)
 1915, 20, 530

C₃₂ IV

- ¹⁸O₆N₂S₂ Thiotyrosine disulfide dibenzoate (JOHNSON and
 BRAUTLECHT) 1912, 12, 193

C₃₄ Group

- ⁷⁰ Tetratriacontane (LEVENE, WEST, and VAN DER SCHEER)
 1915, 20, 531

C₃₅ Group**C₃₅ IV**

- ¹⁸ON₇Cl *o*-Chloroacetylaminop',*p*'-tetraethyldiaminotri-
 phenylmethane and hexamethylenetetramine (JACOBS
 and HEIDELBERGER) 1915, 21, 142
p-Chloroacetylaminop',*p*'-tetraethyldiaminotri-
 phenylmethane and hexamethylenetetramine (JACOBS
 and HEIDELBERGER) 1915, 21, 142

C₃₆ Group

- ⁴ Hexatriacontane (LEVENE, WEST, and VAN DER SCHEER)
 1915, 20, 531

C₃₆ II

- ⁴O₈ Tribenzoylbaptisol (CLARK) 1915, 21, 655

C₄₁ Group**C₄₂ II**

C₄₂H₇₈O₆	Isomannid distearate (BLOOR)	1912, 11, 145
	Mannid distearate (BLOOR)	
		1909-10, 7, 427; 1912, 11, 143
C₄₂H₈₀O₇	Mannitan distearate (BLOOR)	1912, 11, 144

SUGGESTIONS FOR THE PREPARATION OF MANUSCRIPTS.

COPY.

All manuscripts should be copied with triple spacing and 1½ inch margins.

The original typewritten copy should be submitted for publication, not a carbon copy. It should be sent flat, not rolled or folded. All corrections on the manuscript should be clearly written in ink. Manuscripts should be consistent in style; a word should not be abbreviated in one line and written out a few lines below.

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The title should be written on a separate sheet. The author's name, the laboratory where the work was done, and the words, received for publication, should be written on a separate sheet. An abbreviated form of the title, not exceeding thirty-six characters in length, and the author's name and initials, to be used in running headlines, should be given, also on a separate sheet.

HEADINGS.

Major headings, such as INTRODUCTION, EXPERIMENTAL, DISCUSSION, SUMMARY, CONCLUSION, BIBLIOGRAPHY, EXPLANATION OF METHODS, also TABLE in table headings, are printed in small capitals, and therefore should be underlined twice.

Minor headings, whether center or side, and descriptive material in table headings, are printed in italics, and therefore underlined once in the manuscript. Capitalize the nouns, adjectives, pronouns, verbs, *Cc.*, *Gm.*, *per Cent*, etc.

Dates are not underlined, except when they occur in an italicized heading.

The form September 15, 1915, is preferred to IX-15-15.

TEXT.

Begin every experiment, table, or quotation of over five lines on a new sheet. When the text is resumed start with another fresh sheet. This method brings the material of the entire manuscript in sequence, but permits, without mutilation of the manuscript, the separation in the Printer's office of tables, and all other small type, which are set up separately.

Number the sheets consecutively throughout. Mark in ink the place for each illustration.

TABLES.

The form for table headings has already been given under "HEADINGS." Table column headings are written in small letters and followed by periods (see Table I).

Words like *gm.*, *cc.*, *per cent*, *°C.*, etc., referring to an entire column in a table, are written in small letters at the top of the column, and underlined once.

In tables use ditto marks for words when possible, but not for figures.

TABLE I.

Changes in the Blood of Rabbit 1 after Hemorrhage.

Date.	Amount of blood re- moved.	Hemo- globin.	Red blood corpuscles.	Remarks.
<i>1915</i>	<i>cc.</i>	<i>per cent</i>		
Sept. 13	10	89	5,160,000	Weight 1,605 gm.
" 14	10	68	2,870,000	No nucleated red cells.
" 15	10	75	3,990,000	" " " "
" 16	10	58	3,070,000	" " " "

FOOT-NOTES.

Foot-Notes to Text.—Typewrite all foot-notes together at the end of the paper and number them consecutively from 1 up, to correspond with the reference numbers in the text.

all foot-note references consecutively throughout the manuscript. If the foot-note references on the first page are 1, 2, 3, etc., the foot-note references on the second page should be 4, 5, 6, etc. Superior numbers (1, 2, 3) should be used in the text to indicate

which should be used in typewriting foot-notes.

to Tables.—Foot-notes to tables are starred (*, **, ***) and numbered, in order to distinguish them from foot-

REFERENCES.

References are usually printed in the form of foot-notes, and are numbered and located with the other foot-notes. If a reference is referred to more than once, the foot-note is repeated with the first reference. The number of the foot-note is repeated at subsequent points in the text where the same reference is referred to. Do not use *loc. cit.*

or, if preferred, the references may be printed in a bibliography at the end of the paper. In this case one of two systems may be adopted: (a) The references in the bibliography are numbered in the order of their appearance in the manuscript independently of the foot-notes. (b) They are arranged in the bibliography according to the names of the authors. In this system the reference is the name of the author followed by the publication referred to. If more than one article by the same author in a given year is referred to, the letters *a*, *b*, *c*, etc., are used to differentiate them. This system is convenient for many other reasons, of the ease with which new references may be inserted in the manuscript, and of the readiness with which a given reference can be located in the printed bibliography.

References to a bibliography are indicated by numbers in the text instead of the superior numbers used for foot-notes. "Ehrlich" indicates a foot-note; but "Ehrlich (1)" or "Ehrlich (1), 1910, a)" or "(Ehrlich, 1910, a)" indicates a reference to the bibliography. Two separate series of numbers can be used in the same text to indicate respectively foot-notes and references to the bibliography.

or references is indicated by the following example,

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the order of data being: author, initials, journal (underlined), year, volume (small Roman numerals), and page:

* Fischer, E., *Ber. chem. Ges.*, 1889, xxii, 87.

The abbreviations used by the *Journal* for the most commonly cited publications are listed below.

<i>Am. Chem. J.</i>	<i>Ergebn. allg. Path. u. path. Anat.</i>
<i>Am. J. Physiol.</i>	<i>Gazz. chim. ital.</i>
<i>Ann. Chem.</i>	<i>J. Agric. Research.</i>
<i>Ann. chim. phys.</i>	<i>J. Am. Chem. Soc.</i>
<i>Arch. exp. Path. u. Pharm.</i>	<i>J. Am. Med. Assn.</i>
<i>Arch. ges. Physiol.</i>	<i>J. Biol. Chem.</i>
<i>Arch. Int. Med.</i>	<i>J. Chem. Soc.</i>
[Arkansas] <i>Agric. Exp. Station, Bull.</i>	<i>J. Exp. Med.</i>
[5, 1915].	<i>J. Ind. and Eng. Chem.</i>
<i>Ber. chem. Ges.</i>	<i>J. Pharm. and Exp. Ther.</i>
<i>Berl. klin. Woch.</i>	<i>J. Physiol.</i>
<i>Biochem. J.</i>	<i>J. prakt. Chem.</i>
<i>Biochem. Z.</i>	<i>Monatschr. Chem.</i>
<i>Bull. Hyg. Lab., U. S. P. H.</i>	<i>Proc. Roy. Soc., Series B.</i>
<i>Bull. Soc. chim.</i>	<i>Proc. Soc. Exp. Biol. and Med.</i>
<i>Carnegie Institution of Washington,</i>	<i>Rec. trav. chim. Pays-Bas.</i>
<i>Publication No. [156, 1911].</i>	<i>U. S. Dept. Agric., Bureau of [Pl</i>
<i>Chem. Abstr.</i>	<i>Industry], Bull. [31, 1914].</i>
<i>Chem. Zentr.</i>	<i>Z. physik. Chem.</i>
<i>Compt. rend. Acad.</i>	<i>Z. physiol. Chem.</i>

In order to distinguish books from periodicals, titles of books are not underlined. The place of publication, the year, and the page should be given, and the edition when there is more than one.

References to books and journals should not be inserted in the text.

EXPLANATION OF FIGURES.

Typewrite explanations of the figures, whether for plates, text-figures, and number them to correspond with the figure which they refer. The Bibliography precedes the Explanation of Figures.

FORMS AND ABBREVIATIONS.

Gram = gm.	a.m., p.m. (lower case).
Cubic centimeter = cc.	In both large and small type
Centimeter = cm.	write 30 cc., 20 mg., 20 gm.
Millimeter = mm.	Always write 0.25; i.e., with
Milligram = mg.	a zero before the decimal
Kilogram = kilo or kg.	point.
per cent (without a period).	

Use the form 193–194.5°, placing the degree mark at the end only.

Use $[\alpha]_D^{20}$ for specific rotation (for 20° and sodium light). The values for $[\alpha]$ are best expressed in the following way:

$$[\alpha]_D^{25} = \frac{-0.25^\circ}{1} \times \frac{2.1662}{0.1505} = -3.58^\circ$$

For normal and molecular solutions the expressions 2.5 N and 0.5 M are preferred to $2\frac{1}{2}$ N and $\frac{M}{2}$. In exceptional cases, however, as 3/16 M, the fractional form is more convenient.

Hydrated salts should be written as CuSO₄·5H₂O.

Small numbers in the text are usually written out, large numbers expressed in numerals; thus seven, but 250.

In numbers of four figures or over use commas; as 1,000, 10,000.

SPELLING.

Words like hemorrhage, anesthetic, etc., are spelled with e (not ae).

Use f instead of ph for sulfur and sulfur derivatives.

Words serving as special names of definite objects, such as Experiment 8, Table I, Rabbit 1, are written with capital letters.

NOMENCLATURE.

The usage of the American Chemical Society is followed. The following rules cover most of the terms used in this *Journal*.

Hydroxyl derivatives of hydrocarbons are to be given names ending in -ol; as glycerol, cholesterol, pinacol (not pinacone). This applies also to alcohols of the sugar series; as mannitol, heptitol, etc.

Compounds which are not alcohols but have received names ending in *-ol* should be spelled *-ole*; as *anisole*, *indole*. (German hydrocarbon names, as *Benzol*, *Toluol*, etc., are to be written *benzene*, *toluene*, etc.)

Hydroxy- and not oxy- should be used in designating a hydroxyl compound; as *hydroxyacetic acid*, $\text{CH}_2(\text{OH})\text{CO}_2\text{H}$, (not *oxyacetic acid*).

As regards the endings *-in* and *-ine*, the latter should always be used for *basic* substances, and for them only; *-in* is used for glycerides, glucosides, bitter principles, proteins, etc.; thus *aniline*, *tyrosine*, *purine*, *morphine*; but *gelatin*, *palmitin*, *amygdalin*, *albumin*, *protein* (not *proteid*).

When a substituent is one of the groups NH_2 , NHR , NR_2 , NH , or NR , its name should end in *-ino*; thus $\text{NH}_2\text{CH}_2\text{CH}_2\text{CO}_2\text{H}$, β -*aminopropionic acid* (not *amidopropionic acid*); $\text{C}_6\text{H}_5\text{NHCH}_2\text{CH}_2\text{CO}_2\text{H}$, β -*anilinopropionic acid*; $\text{CH}_3\text{CH}_2\text{NH}_2\text{CO}_2\text{H}$, α -*aminopropionic acid*.

The term *ether* must not be used for compounds which are properly called esters. Esters and metallic salts should be designated in the form, diethyl phthalate, methyl hydrogen succinate, sodium propionate, etc. (not as the diethyl ester of phthalic acid, the monomethyl ester of succinic acid, or the sodium salt of propionic acid).

Acid radicals, such as $\text{C}_6\text{H}_5\text{CO}$, must have names ending in *-yl*, and their compounds with halogens, as $\text{C}_6\text{H}_5\text{COCl}$, are to be termed chlorides, bromides, etc. Thus, *benzoyl chloride* (not chloride of benzoic acid or benzoic acid chloride).

The connective *o* is to be used in such combining forms as *amino-*, *bromo-*, *chloro-*, *ciano-*, and *iodo-*; thus *bromobenzene*, *chloroacetic*, *nitroaniline*. A few exceptions to this rule are permitted on account of long established usage; as *acetamide*, *cyanamide*.

Substances containing the group SO_3H should, if possible, be called *sulfonic acids*; failing this, *sulfo compounds*; thus *phenylsulfonic acid*, $\text{C}_6\text{H}_5\text{SO}_3\text{H}$, and *sulfobenzoic acid*, $\text{HO}_2\text{CC}_6\text{H}_4\text{SO}_3\text{H}$.

Salts of organic bases with hydrochloric acid should be called *hydrochlorides* (not *hydrochlorates* or *chlorhydrates*).

Salts of chloroplatinic acid are called *chloroplatinates* (not *platinichlorides*), and the formulas should be written in the form

Suggestions for Preparation of Manuscripts 591

$(\text{CH}_3\text{NH}_2)_2\text{H}_2\text{PtCl}_6$. Salts of thiocyanic acid, HCNS , should be called thiocyanates. Use sodium thiosulfate for $\text{Na}_2\text{S}_2\text{O}_3$.

The word hydroxide should be used for a compound with OH , and hydrate for a compound with H_2O ; thus, chlorine hydrate, $\text{Cl}_2 \cdot 10\text{H}_2\text{O}$; barium hydroxide, $\text{Ba}(\text{OH})_2$.

Greek letters should be indicated by Gk. on the margin of the manuscript.

The following letters are italicized and should be underlined: *o*-, *m*-, *p*-, *d*-, and *l*-, for ortho, meta, para, dextro, and levo.

Use *dl*- (not *r*-) for racemic.

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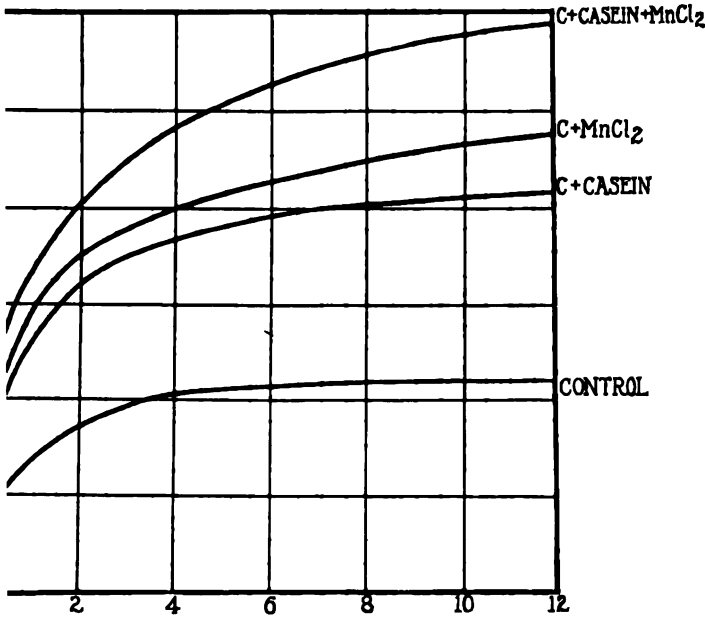
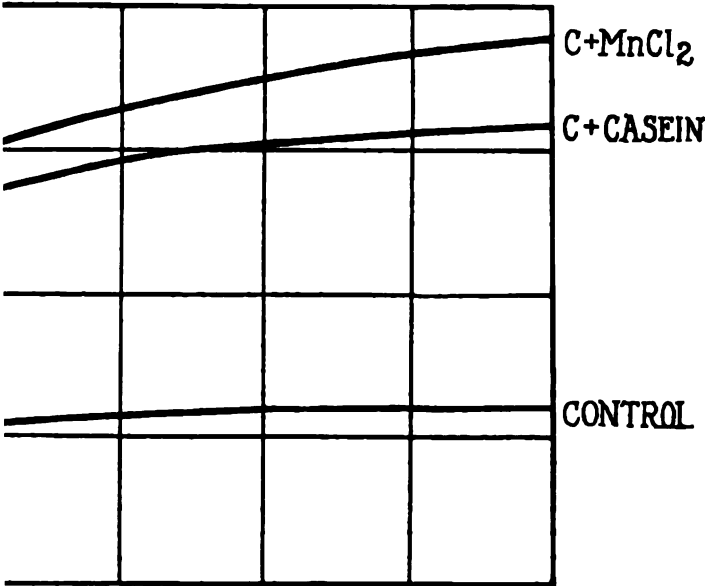
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Benzoyl- α -aminocinnamic acid:

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1918, 33, 62**Benzeneazobenzeneazo- β -naphthol:**Elimination of, from body
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Dibutylmalonic acid:

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Esters, hydrolysis of, by
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Catalase production, effect
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1920, 41, 307

Diervilla:

Anthocyanin formation in
flowers of (SHIBATA,
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1916-1917, 28, 95

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Acid-forming, alkali reserve
of blood, effect on (Mc-
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1920, 41, v

—, blood sugar content,
effect on (McDANELL
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1917, 29, 233

—, and sodium carbonate,
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(McDANELL and UNDER-
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1917, 29, 231

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Adequate and inadequate,
choice of rats (OSBORNE
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1918, 35, 19

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1919, 38, 539

— — of swine, effect on
(FORBES, HALVERSON,
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of chickens, effect on
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1921, 47, 456

Base-forming, blood sugar
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1917, 29, 231

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1922, 50, xxxv

— of calves, changes in
composition of (BLATH-
ERWICK)

1920, 42, 522

— phenol content, effect
on (PELKAN and WHIP-
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1922, 50, 504

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(MEIGS, BLATHERWICK,
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tion between (ANDERSON
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1917, 32, 421

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1921, 48, 33

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on (KRAMER and HOW-
LAND)

1922, 50, xxi

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(GIVENS)

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urine, effect on (DENIS
and MINOT)

1918, 34, 569

Carotinoid-free (PALMER
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1919, 39, 300

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bohydrates of (ZENT-
MIRE and FOWLER)

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1918, 33, 92

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on (DENIS and MINOT)

1917, 31, 561

— in urine, effect on
(ROSE, DIMMITT, and
BARTLETT)

1918, 34, 601

Energy production, in-
terrelation between (AN-
DERSON and LUSK)

1917, 32, 421

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1917, 29, 245

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1920-1921, 45, 229

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PITZ)

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(HART, STEENBOCK, and
ELLIS)

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DUTCHER)

1922, 50, 339

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1920-1921, 45, 229

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1922, 50, xxxv

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meal, deficiencies of (Mc-
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logical analysis of (Mc-
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1920, 44, 69

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1922, 50, xxi

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— — and chloride excre-
tion, effect on (AUSTIN
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LUM, SIMMONDS, and
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elimination, effect on
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- Urinary constituents, excretion of, effect on (UNDERHILL and BOGERT)
1916, 27, 161
- Urine of calves, composition of, effect on (BLATHERWICK)
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Diethyl dibutylmalonate:

- Preparation (LEVENE and CRETCHER)
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1921, 47, 501

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- Hydrolysis by liver lipase (CHRISTMAN and LEWIS)
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**3, 5-Dinitro-4-hydroxyphenyl-
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1920-1921, 45, 263

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1921, 49, 325

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1916, 26, 40

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1916, 26, 1

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—, — hyperglycemia, effect on (KURIYAMA)

1917, 29, 136

—, metabolism of fasting dog, effect on (RINGER and UNDERHILL)

1921, 48, 511

—, peptic digestion, inhibition of, by tin (GOSS)

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 - 1916-1917, 28, 125
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 - 1920, 41, 195
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 - 1921, 46, xlviii
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 - 1917, 30, 5
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 - 1921, 48, 433
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 - 1917, 31, 281
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 - 1916, 26, 263

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 - 1916, 26, 263
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 - 1916-1917, 28, 475
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 - 1920, 41, 195
- , formation, rôle of calcium (BUCKNER)
 - 1922, 50, xli
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 - 1922, 50, 84
- , corn, nutritive value, effect on (HOGAN)
 - 1916, 27, 202
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 - 1917, 30, 115
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 - 1918, 36, 14
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 - 1921, 29, xxvii
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 - 1919, 39, 331
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 - 1917, 31, 649

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—, vitamine, fat-soluble, source of (PALMER and KENNEDY)

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Benzoyl- α -aminocinnamic acid (ANDO)

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1920, 44, 19

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1919, 40, 525

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FORMULA INDEX

The following index of *new* compounds of known empirical formula is arranged according to Richter's system.

The elements are given in the order C, H, O, N, Cl, Br, I, F, S and P, and the remainder alphabetically.

The compounds are arranged in groups according to the number of carbon atoms (thus C₁ group, C₂ group, etc.); according to the number of other elements besides carbon contained in the molecule (thus C₅ IV indicates that the molecule contains five carbon atoms and four other elements); according to the nature of the elements present in the molecule (given in the above order); and according to the number of atoms of each single element (except carbon) present in the molecule.

Salts are placed with the compounds from which they are derived. The chlorides, bromides, iodides and cyanides of quaternary ammonium bases, however, are registered as group substances.

C₂ Group

C₂ II

C₂H₅N Trimethylamine: hydroiodide mercuric iodide salt
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C₄ Group

C₄ III

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C₅ Group**C₅ III**

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	<i>d</i> -Gulonic acid, brucine salt (LEVENE and MEYER)	1916, 26, 359
	<i>d</i> -Idonic acid, brucine salt (LEVENE and MEYER)	1916, 26, 360
	<i>d</i> -Mannonic acid, brucine salt (LEVENE and MEYER)	1916, 26, 359
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C₆H₁₅N	Triethylamine, hydroiodide mercuric iodide (WOODWARD and ALSBERG)	1921, 46, 5

C₆ III

C₆H₆O₂N₂	2, 6-Dioxy-5-methylpyrimidine-4-aldehyde (thymine-4-aldehyde) (JOHNSON and CRETCHER)	1916, 26, 112
C₆H₇O₂N₂	2, 6-Dioxy-5-methylpyrimidine-4-aldehyde oxime (JOHNSON and CRETCHER)	1916, 26, 112
C₆H₉O₂N₂	Proline hydantoin (DAKIN)	1920, 44, 527

$C_6H_8O_2N_2$	γ -Hydroxyproline hydantoin (DAKIN)	1920, 44, 518
$C_6H_9O_2N_2$	Deaminocarnosine (BAUMANN and INGVALDSEN)	1918, 35, 269
$C_6H_{12}O_{16}P_4$	Phosphoric inosite ester (ANDERSON)	1920, 43, 126
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	Lyxohexosamine, hydrochloride (LEVENE)	1916, 26, 161
$C_6H_{13}O_6N$	Epichitosaminic acid (LEVENE)	1918, 36, 79
	<i>d</i> -Levoxylohexosaminic acid (LEVENE)	1918, 36, 86
$C_6H_{18}O_{24}P_6$	Inosite hexaphosphoric acid, barium and silver salt (ANDERSON)	1920, 44, 436

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$C_6H_8O_2N_2S$	2-Thio-5-methyl-6-oxypyrimidine-4-aldehyde (2-thio-thymine aldehyde) (JOHNSON and CRETCHER)	1916, 26, 109
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$C_6H_{12}O_5NCl$	Dextro- <i>d</i> -ribohexosaminic acid lactone hydrochloride (LEVENE and CLARK)	1921, 46, 29
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	Epichitosaminic acid lactone hydrochloride (LEVENE)	1918, 36, 77
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C₇ GroupC₇ II

$C_7H_{12}O_6$	Anhydrosedoheptose (LA FORGE and HUDSON)	1917, 30, 73
$C_7H_{14}O_2$	5-Methylhexylic acid (LEVENE and ALLEN)	1916, 27, 442
$C_7H_{14}O_7$	α - <i>d</i> -Guloheptose (LA FORGE)	1920, 41, 253
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- C₇H₁₅I** 5-Methylhexyl iodide (LEVENE and ALLEN) 1916, 27, 446
C₇H₁₅O 5-Methylhexyl alcohol (LEVENE and ALLEN) 1916, 27, 443
C₇H₁₅O₇ α-Guloheptitol (LA FORGE) 1920, 41, 255
 β-Guloheptitol (LA FORGE) 1920, 41, 256
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C₇ III

- C₇H₁₅ON** 5-Methylhexylic amide (LEVENE and ALLEN) 1916, 27, 442
C₇H₁₅O₇N Chondrosaminoheptonic acid, copper salt (LEVENE) 1916, 26, 152
C₇H₁₅O₈P α-Methylglucosidophosphoric acid (LEVENE and MEYER) 1921, 48, 235

C₈ Group

C₈ II

- C₈H₁₇O₂** 6-Methylheptylic acid (LEVENE and ALLEN) 1916, 27, 452
C₈H₁₇O 6-Methylheptyl alcohol (LEVENE and ALLEN) 1916, 27, 452

C₈ III

- C₈H₁₇ON** 6-Methylheptylic amide (LEVENE and ALLEN) 1916, 27, 452

C₈ IV

- C₈H₁₀O₂N₂S** 2-Ethylmercapto-5-methyl-6-oxypyrimidine-4-aldehyde (JOHNSON and CRETCHER) 1916, 26, 111
C₈H₁₁O₂N₂S 2-Ethylmercapto-5-methyl-6-oxypyrimidine-4-aldehyde oxime (JOHNSON and CRETCHER) 1916, 26, 111

C₈ V

- C₈H₇O₁₀N₂AsHg** 3, 5-Dinitro-4-hydroxyphenylarsinic acid mercuric acetate (RAIZISS, KOLMER, and GAVRON) 1919, 40, 537
C₈H₇O₉NAsHg 3-Nitro-4-hydroxyphenylarsinic acid mercuric acetate (RAIZISS, KOLMER, and GAVRON) 1919, 40, 536
C₈H₇O₉N₂AsHg 3-Nitroarsanilic acid mercuric acetate (RAIZISS, KOLMER, and GAVRON) 1919, 40, 535

- C₉H₁₀O₅NAsHg** 3-Amino-4-hydroxyphenylarsinic acid mercuric acetate (RAIZISS, KOLMER, and GAVRON) 1919, 40, 537
- C₉H₁₁O₅N₂AsHg** 3, 5-Diamino-4-hydroxyphenylarsinic acid mercuric acetate (RAIZISS, KOLMER, and GAVRON) 1919, 40, 538

C, VI

- C₉H₉O₅NBrAsHg** 3-Bromoarsanilic acid mercuric acetate (RAIZISS, KOLMER, and GAVRON) 1919, 40, 541

C, Group

C, II

- C₉H₁₁O₄** 4-Methylpentylmalonic acid (LEVENE and ALLEN) 1916, 27, 451
- C₉H₁₅O₂** Ethyl 5-methylhexylate (LEVENE and ALLEN) 1916, 27, 442
- 7-Methyloctylic acid (LEVENE and ALLEN) 1916, 27, 447
- C₉H₁₉O₆** 3,5,6-Trimethylglucose (LEVENE and MEYER) 1921, 48, 244
- C₉H₁₉I** 7-Methyloctyl iodide (LEVENE and ALLEN) 1916, 27, 448
- C₉H₂₀O** 7-Methyloctyl alcohol (LEVENE and ALLEN) 1916, 27, 448

C, III

- C₉H₁₉O₈P** 1,2-Monoacetonephosphoric acid glucoside (LEVENE and MEYER) 1921, 48, 238
- C₉H₁₉ON** 7-Methyloctylic amide (LEVENE and ALLEN) 1916, 27, 447

C, IV

- C₉H₉O₇AsHg** 4-Carboxyphenylarsinic acid mercuric acetate (*p*-Benzarsinic acid mercuric acetate) (RAIZISS, KOLMER, and GAVRON) 1919, 40, 539
- C₉H₁₄O₈N₂P** Cytidinephosphoric acid, brucine and barium salts (LEVENE) 1919, 39, 77
- C₉H₁₄O₈N₂P** Urindinphosphoric acid, ammonium, barium, brucine and lead salts (LEVENE) 1918, 33, 233; 1919, 40, 395; 1920, 41, 1

C₁₀ Group

C₁₀ I

- C₁₀H₂₂** 2-Butylhexane (LEVENE and CRETCHER) 1918, 33, 510

C₁₀ II

- C₁₀H₁₈O** Oil isolated from urine (ANDERSON) 1916, 26, 395, 401, 409
C₁₀H₁₈O₄ 5-Methylhexylmalonic acid (LEVENE and ALLEN) 1916, 27, 446
C₁₀H₂₀O₂ 2-Butylhexylic acid (LEVENE and CRETCHER) 1918, 33, 508
 Ethyl 6-methylheptylate (LEVENE and ALLEN) 1916, 27, 452
 8-Methylnonylic acid (LEVENE and ALLEN) 1916, 27, 454
C₁₀H₂₁O₆ 3,5,6-Trimethyl methylglucoside (LEVENE and MEYER) 1921, 48, 244
C₁₀H₂₁I 2-Butylhexyl iodide (LEVENE and CRETCHER) 1918, 33, 509
C₁₀H₂₂O 2-Butylhexyl alcohol (LEVENE and CRETCHER) 1918, 33, 509

C₁₀ III

- C₁₀H₁₀O₂N₂** *d*-α-Phenylmethylhydantoin (WEST) 1918, 34, 190
C₁₀H₁₂O₃N₂ *d*-α-Phenylureidopropionic acid (WEST) 1918, 34, 189
C₁₀H₁₄O₃N₂ Hydroxypropylproline anhydride (DAKIN) 1920, 44, 524
C₁₀H₁₄O₃N₃ Guanylic acid, brucine salt (LEVENE) 1919, 40, 171
C₁₀H₂₁O₃P 3,5,6-Trimethyl-2-phosphoric acid methyl glucoside (LEVENE and MEYER) 1921, 48, 245

C₁₀ IV

- C₁₀H₁₆O₃N₂S** 2-Thio-4-diethoxymethyl-5-methyl-6-oxypyrimidine (JOHNSON and CRETCHER) 1916, 26, 108
C₁₀H₁₇O₁₂N₃P₂ Hexocytidindiphosphoric acid, barium and brucine salts (LEVENE) 1921, 48, 123

C₁₀ VI

- C₁₀H₉O₈NBrAsHg** 3-Bromooxalylarsanilic acid mercuric acetate (RAIZISS, KOLMER, and GAVRON) 1919, 40, 541

C₁₁ Group**C₁₁ II**

- C₁₁H₂₀O₄** Dibutylmalonic acid (LEVENE and CRETCHER)
1918, 33, 507
- C₁₁H₂₀O₅** Ethyl α -methyl- γ,γ -diethoxyacetoacetate (JOHNSON
and CRETCHER) 1916, 26, 107
6-Methylheptylmalonic acid (LEVENE and ALLEN)
1916, 27, 453
- C₁₁H₂₂O₂** Ethyl 7-methyloctylate (LEVENE and ALLEN)
1916, 27, 447

C₁₁ III

- C₁₁H₁₀O₄N₂** Antiphenylhydantoinhydroxyacetic acid (DAKIN)
1921, 48, 287
Paraphenylhydantoinhydroxyacetic acid (DAKIN)
1921, 48, 284
- C₁₁H₁₀ON₃** Oil from urine, semicarbazone (ANDERSON)
1916, 26, 393, 401

C₁₁ IV

- C₁₁H₁₀O₃NI₃** Thyroxin, ammonium, barium, calcium, copper,
magnesium, nickel, potassium and zinc salts, hydro-
chloride and sulfate (KENDALL and OSTERBERG)
1919, 40, 314
- C₁₁H₁₈O₁₃N₂P₂** Hexothymidindiphosphoric acid, barium and bru-
cine salts (LEVENE) 1921, 48, 123

C₁₂ Group**C₁₂ II**

- C₁₂H₂₂O₄** 7-Methyloctylmalonic acid (LEVENE and ALLEN)
1916, 27, 449
- C₁₂H₂₂O₆** 3,5,6-Trimethyl-1,2-acetoneglucose (LEVENE and
MEYER) 1921, 48, 243
- C₁₂H₂₄O₂** 4-Butyloctylic acid (LEVENE and CRETCHER)
1918, 33, 511
Ethyl 2-butylhexylate (LEVENE and CRETCHER)
1918, 33, 508
- C₁₂H₂₅I** 4-Butyloctyl iodide (LEVENE and CRETCHER)
1918, 33, 511
- C₁₂H₂₆O** 4-Butyloctyl alcohol (LEVENE and CRETCHER)
1918, 33, 511

C₁₂ III

- C₁₂H₁₁O₂N₃** 2,6-Dioxy-5-methylpyrimidine-4-aldehyde anil (JOHNSON and CRETCHER) 1916, 26, 113
C₁₂H₁₄O₄N₂ Hippuryl-β-alanine (BAUMANN and INGVALDSEN) 1918, 35, 276
C₁₂H₁₇O₂N 3-Methylbutyl phenylurethane (LEVENE and ALLEN) 1916, 27, 440
C₁₂H₂₁O₈P 1,2,3,5-Diacetone-6-phosphoric acid glucoside (LEVENE and MEYER) 1921, 48, 237

C₁₂ IV

- C₁₂H₁₁ON₃S** 2-Thio-5-methyl-6-oxypyrimidine-4-aldehyde anil (JOHNSON and CRETCHER) 1916, 26, 110
C₁₂H₁₁O₂N₂I₂ Thyroxin ureide (KENDALL and OSTERBERG) 1919, 40, 327
C₁₂H₂₁O₃N₂S 2-Ethylmercapto-4-diethoxymethyl-5-methyl-6-oxypyrimidine (JOHNSON and CRETCHER) 1916, 26, 110

C₁₂ V

- C₁₂H₁₅O₂N₂AsHg** Diacetyl-3,5-diamino-4-hydroxyphenylarsinic acid mercuric acetate (RAIZISS, KOLMER, and GAVRON) 1919, 40, 540

C₁₃ Group

C₁₃ II

- C₁₃H₂₄O₄** 2-Butylhexylmalonic acid (LEVENE and CRETCHER) 1918, 33, 510
 Ethyl 4-methylpentylmalonate (LEVENE and ALLEN) 1916, 27, 451

C₁₃ III

- C₁₃H₁₆O₅N₂** Sedoheptose osone *o*-phenylenediamine compound (LA FORGE and HUDSON) 1917, 30, 67
C₁₃H₁₉O₂N 4-Methylpentyl phenylurethane (LEVENE and ALLEN) 1916, 27, 451

C₁₃ IV

- C₁₃H₁₂O₄NI₃** Thyroxin acetate, sulfate, ammonium, barium, calcium, potassium, sodium, and silver salts (KENDALL and OSTERBERG) 1919, 40, 323
C₁₃H₁₆O₅NCl Benzal *d*-l-xylohexosaminic acid lactone hydrochloride (LEVENE) 1918, 36, 86

$C_{13}H_{19}O_6N_2Br$	<i>d</i> -Mannoaldoheptose	<i>p</i> -bromophenylhydrazone
(LA FORGE)		1916-1917, 28, 522
	<i>d</i> -Mannoketoheptose	<i>p</i> -bromophenylhydrazone
(LA FORGE)		1916-1917, 28, 518

C₁₄ Group**C₁₄ II**

$C_{14}H_{26}O_4$	Ethyl 5-methylhexylmalonate (LEVENE and ALLEN)	1916, 27, 446
$C_{14}H_{28}O_2$	Ethyl 4-butyloctylate (LEVENE and CRETCHER)	1918, 33, 511

C₁₄ III

$C_{14}H_{12}O_2N_2$	<i>d</i> - α -Naphthylmethylhydantoin (WEST)	1918, 34, 191
	<i>dl</i> - α -Naphthylmethylhydantoin (WEST)	1918, 34, 190
$C_{14}H_{14}O_3N_2$	<i>d</i> - α -Naphthylureidopropionic acid (WEST)	1918, 34, 191
$C_{14}H_{21}O_2N$	<i>n</i> -Heptyl phenylurethane (LEVENE and TAYLOR)	1918, 35, 283
	5-Methylhexyl phenylurethane (LEVENE and ALLEN)	1916, 27, 446

C₁₅ Group**C₁₅ II**

$C_{15}H_{28}O_4$	Diethyl dibutylmalonate (LEVENE and CRETCHER)	1918, 33, 507
	Ethyl 6-methylheptylmalonate (LEVENE and ALLEN)	1916, 27, 453

C₁₅ III

$C_{15}H_{23}O_2N$	6-Methylheptyl phenylurethane (LEVENE and ALLEN)	1916, 27, 453
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C₁₆ Group**C₁₆ II**

$C_{16}H_{30}O_4$	Ethyl 7-methyloctylmalonate (LEVENE and ALLEN)	1916, 27, 448
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C₁₆ III

$C_{16}H_{14}O_5N_2$	Phenylaminomalic acid anil (DAKIN)	1921, 48, 290
$C_{16}H_{22}O_{10}P$	1,2-Monoacetone-6-benzoyl phosphoric acid glucoside (LEVENE and MEYER)	1921, 48, 239
$C_{16}H_{25}O_2N$	7-Methyloctyl phenylurethane (LEVENE and ALLEN)	1916, 27, 448

C₁₆ IV

C₁₆H₁₆O₄N₃S α -Naphthalenesulfonylhistidine (BAUMANN and
INGVALDSEN) 1918, 35, 275

C₁₇ Group

C₁₇ II

C₁₇H₃₂O₄ Diethyl 2-butylhexylmalonate (LEVENE and CRET-
CHER) 1918, 33, 510

C₁₈ Group

C₁₈ III

C₁₈H₁₇O₄N Cinnamoyltyrosine (ANDO) 1919, 38, 9

C₁₈H₂₀O₈N₂ Benzeneazophenol glucuronate (SALANT and BENGIS)
1916, 27, 408

C₁₈H₂₀O₈N₂ Benzeneazoresorcinol glucuronate (SALANT and
BENGIS) 1916, 27, 407

C₁₈H₂₄O₄N₄ Xylohexosamine osazone (LEVENE)
1916, 26, 160

C₁₉ Group

C₁₉ III

C₁₉H₂₄O₈N₄ Sedoheptose phenylosazone (LA FORGE and HUDSON)
1917, 30, 65

C₁₉H₂₄O₈N₂ *d*-Mannoketoheptose phenylosazone (LA FORGE)
1916-1917, 28, 520

C₁₉ IV

C₁₉H₂₂O₈N₄Br₂ Sedoheptose *p*-bromophenyl osazone (LA FORGE
and HUDSON) 1917, 30, 66

C₂₀ Group

C₂₀ III

C₂₀H₂₁O₄N Cinnamoyltyrosine ester (ANDO) 1919, 38, 8

C₂₁ Group

C₂₁ II

C₂₁H₂₀O₆ Dibenzalanhydrosedoheptose (LA FORGE and HUDSON)
1917, 30, 72

C₂₁ III

C₂₁H₂₂N₄O₈ *p*-Nitrophenacornithinic acid (SHERWIN and HEL-
FAND) 1919, 40, 25

C₂₂ Group**C₂₂ III**

C₂₂H₂₂O₂N₂ Phenylaminomalic acid dianilide (DAKIN)
1921, 48, 290

C₂₂ IV

C₂₂H₂₂O₆NCl Dibenzaldextro-*d*-ribohexosaminic ethyl ester hydrochloride (LEVENE and CLARK)
1921, 46, 30

C₂₆ Group**C₂₆ IV**

C₂₆H₂₂O₆N₂S₂ α -Naphthalenesulfonylhistidine naphthalenesulfonate (BAUMANN and INGVALDSEN)
1918, 35, 274

C₂₈ Group**C₂₈ II**

C₂₈H₃₂O₇ Tribenzal- α -sedoheptitol (LA FORGE and HUDSON)
1917, 30, 69
Tribenzal- β -sedoheptitol (LA FORGE and HUDSON)
1917, 30, 70

C₃₀ Group**C₃₀ II**

C₃₀H₄₈O₂ Mycosterol and digotinin compound (IKEGUCHI)
1919, 40, 177
C₃₀H₄₈O₃ Hydroxymycosterol (IKEGUCHI)
1919, 40, 180

C₃₂ Group**C₃₂ II**

C₃₂H₅₀O₂ Mycosterol acetate (IKEGUCHI)
1919, 40, 179

C₃₆ Group**C₃₆ II**

C₃₆H₅₄O₆ Hydroxymycosterol acetate (IKEGUCHI)
1919, 40, 181

C₃₆ III

C₃₆H₃₂O₁₀N Pentabenzoylxylohexosamine (LEVENE)
1916, 26, 159

C₅₇ Group

C₅₇ III

C₅₇H₁₀₁O₁₅N Acetylcerasin (LEVENE and WEST) 1917, 31, 64

C₆₀ Group

C₆₀ III

C₆₀H₁₀₅O₁₅N Acetylphrenosin (LEVENE and WEST) 1917, 31, 642

C₆₆ Group

C₆₆ III

C₆₆H₁₀₂O₂₅N₄ *p*-Nitrobenzoylphrenosin (LEVENE and WEST) 1917, 31, 647

C₆₆H₁₀₅O₁₅N Benzoylphrenosin (LEVENE and WEST) 1917, 31, 644

C₇₅ Group

C₇₅ III

C₇₅H₁₁₁O₂₅N Cinnamoylphrenosin (LEVENE and WEST) 1917, 31, 646

SUGGESTIONS FOR THE PREPARATION OF MANUSCRIPTS.

COPY.

All manuscripts should be copied with triple spacing and 1½ inch margins.

The original typewritten copy should be submitted for publication, not a carbon copy. It should be sent flat, not rolled or folded. All corrections on the manuscript should be clearly written in ink. Manuscripts should be consistent in style; a word should not be abbreviated in one line and written out a few lines below.

TITLE.

The title, author's name, and laboratory where the work was done should appear as the heading of the paper, followed by the words: Received for publication, —, —. The title, etc., should be written on a separate sheet.

An abbreviated form of the title, not exceeding thirty-six letters in length, to be used as a running headline, should be given, also on a separate sheet.

HEADINGS.

Major headings, such as INTRODUCTION, EXPERIMENTAL, DISCUSSION, SUMMARY, CONCLUSION, BIBLIOGRAPHY, also TABLE in table headings, are printed in small capitals, and therefore should be underlined twice.

Minor headings, whether center or side, and descriptive matter in table headings, are printed in italics, and therefore underlined once in the manuscript. Capitalize the nouns, adjectives, pronouns, verbs, Cc., Gm., Per Cent, etc.

Dates are not underlined, except when they occur in an italicized heading.

The form Sept. 15, 1915, is preferred to IX-15-15

TEXT.

Begin every experiment, table, or quotation of over five lines on a new sheet. When the text is resumed start with another fresh sheet. This method brings the material of the entire manuscript (except foot-notes, etc.) in sequence, but permits, without mutilation of the manuscript, the separation in the Printer's office of tables, etc., which are set up separately.

Number the sheets consecutively throughout. Mark in ink the place for each illustration.

TABLES.

The form for table headings has already been given under "HEADINGS." Table column headings are written in small letters and followed by periods (see Table I).

Words like *gm.*, *cc.*, *per cent*, $^{\circ}\text{C.}$, etc., referring to an entire column in a table, are written in small letters at the top of the column, and underlined once.

In tables use ditto marks for words when possible, but not for figures.

TABLE I.

Changes in the Blood of Rabbit 1 after Hemorrhage.

Date.	Amount of blood re- moved.	Hemo- globin.	Red blood corpuscles.	Remarks.
<i>1915</i>	<i>cc.</i>	<i>per cent</i>		
Sept. 13	10	89	5,160,000	Weight 1,605 gm.
" 14	10	68	2,870,000	No nucleated red cells.
" 15	10	75	3,990,000	" " " "
" 16	10	58	3,070,000	" " " "

FOOT-NOTES.

Foot-Notes to Text.—Typewrite all foot-notes together at the end of the paper and number them consecutively from 1 up, to correspond with the reference numbers in the text.

Suggestions for Preparation of Manuscripts 431

Number all foot-note references consecutively throughout the paper; *i.e.*, if the foot-note references on the first page are 1, 2, 3, those on the second page should be 4, 5, 6, etc. Superior numerals (located as ¹, ², ³) should be used in the text to indicate foot-notes.

Double spacing should be used in typewriting foot-notes.

Foot-Notes to Tables.—For foot-notes to tables the following symbols are used (*, †, ‡, etc.), not numbered, in order to distinguish them from foot-notes to text.

REFERENCES.

References are usually printed in the form of foot-notes, and as such are numbered and located with the other foot-notes. If a given article is referred to more than once, the foot-note is printed only with the first reference. The number of the foot-note is repeated at subsequent points in the text where the same article is referred to. Do not use *loc. cit.*

If the author prefers, the references may be printed in a bibliography at the end of the paper. In this case one of two systems is usually adopted: (a) The references in the bibliography are arranged and numbered in the order of their appearance in the text and independently of the foot-notes. (b) They are arranged alphabetically according to the names of the authors. In this case the text reference is the name of the author followed by the year of the publication referred to. If more than one article by the same author in a given year is referred to, the letters *a*, *b*, *c*, etc., may be used to differentiate them. This system is convenient because, among other reasons, of the ease with which new references can be inserted in the manuscript, and of the readiness with which a given reference can be located in the printed bibliography.

Text references to a bibliography are indicated by numbers in parentheses instead of the superior numbers used for foot-notes. Thus "Ehrlich¹" indicates a foot-note; but "Ehrlich (1)" or "Ehrlich (1910, *a*)" or "(Ehrlich, 1910, *a*)" indicates a reference in the bibliography. Two separate series of numbers can thus be used in the same text to indicate respectively foot-notes and references in the bibliography.

The form for references is indicated by the following example,

the order of data being: author, initials, journal (underlined), year, volume (small Roman numerals), and page:

¹ Fisher, E., *Ber. chem. Ges.*, 1889, xxii, 87.

The abbreviations used by the *Journal* for the most commonly cited publications are listed below.

<i>Am. Chem. J.</i>	<i>Ergebn. allg. Path. u. path. Anat.</i>
<i>Am. J. Physiol.</i>	<i>Gazz. chim. ital.</i>
<i>Ann. chim. phys.</i>	<i>J. Agric. Research.</i>
<i>Ann. Chem.</i>	<i>J. Am. Chem. Soc.</i>
<i>Arch. ges. Physiol.</i>	<i>J. Am. Med. Assn.</i>
<i>Arch. exp. Path. u. Pharmacol.</i>	<i>J. Biol. Chem.</i>
<i>Arch. Int. Med.</i>	<i>J. Chem. Soc.</i>
[Arkansas] <i>Agric. Exp. Station,</i>	<i>J. Exp. Med.</i>
<i>Bull.</i> [5, 1915].	<i>J. prakt. Chem.</i>
<i>Ber. chem. Ges.</i>	<i>J. Ind. and Eng. Chem.</i>
<i>Berl. klin. Woch.</i>	<i>J. Physiol.</i>
<i>Biochem. J.</i>	<i>J. Russ. Phys. Chem. Soc.</i>
<i>Biochem. Z.</i>	<i>Monatsh. Chem.</i>
<i>Bull. Hyg. Lab., U. S. P. H.</i>	<i>Proc. Roy. Soc. London, Series [B].</i>
<i>Bull. Soc. chim.</i>	<i>Proc. Soc. Exp. Biol. and Med.</i>
<i>Carnegie Inst. Washington, Pub.</i>	<i>Rec. trav. chim. Pays-Bas.</i>
<i>No.</i> [166, 1911].	<i>U. S. Dept. of [Agric.], Bureau of</i>
<i>Chem. Abstr.</i>	<i>[Plant Industry], Bull.</i> [31, 1914].
<i>Chem. Zentr.</i>	<i>Z. physik. Chem.</i>
<i>Compt. rend. Acad.</i>	<i>Z. physiol. Chem.</i>

In order to distinguish books from periodicals, titles of books are not underlined. The place of publication, the year, and the page should be given, and the edition when there is more than one.

References to books and journals should not be inserted in the text.

EXPLANATION OF FIGURES.

Typewrite explanations of the figures, whether for plates or text-figures, and number them to correspond with the figures to which they refer. The Bibliography precedes the Explanation of Figures.

FORMS AND ABBREVIATIONS.

Gram = gm.	10 millimolecular = 10.0 mM
Cubic centimeter = cc.	per cent (without a period).
Centimeter = cm.	a.m., p.m. (lower case).
Millimeter = mm.	In both large and small type
Milligram = mg.	write 30 cc., 20 mg., 20 gm.
Kilogram = kilo or kg.	Always write 0.25; <i>i.e.</i> , with a
Tenth normal = 0.1 N	zero before the decimal point.
Tenth molecular = 0.1 M	

Use the form 193–194.5°, placing the degree mark at the end only.

Use $[\alpha]_D^{25}$ for specific rotation (for 20° and sodium light). The values for $[\alpha]$ are best expressed in the following way:

$$[\alpha]_D^{25} = \frac{-0.25^\circ \times 2.1662}{1 \times 0.1505} = -3.58^\circ$$

For normal and molecular solutions the expressions 2.5 N and 0.5 M are preferred to $2\frac{1}{2}$ N and $\frac{M}{2}$. In exceptional cases, however, as 3/16 M, the fractional form is more convenient.

Hydrated salts should be written as $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$.

Small numbers in the text are usually written out, large numbers expressed in numerals; thus seven, but 250.

In numbers of four figures or over use commas; as 1,000, 10,000.

SPELLING.

Words like hemorrhage, anesthetic, etc., are spelled with e (not ae).

Use f instead of ph for sulfur and sulfur derivatives.

Words serving as special names of definite objects, such as, Experiment 8, Table I, Rabbit 1, are written with capital letters.

NOMENCLATURE.

The usage of the American Chemical Society is followed. The following rules cover most of the terms used in this *Journal*.

Hydroxyl derivatives of hydrocarbons are to be given names

ending in *-ol*; as *glycerol*, *cholesterol*, *pinacol* (not *pinacone*). This applies also to alcohols of the sugar series; as *mannitol*, *heptitol*, etc.

Compounds which are not alcohols but have received names ending in *-ol* should be spelled *-ole*; as *anisole*, *indole*. (German hydrocarbon names, as *Benzol*, *Toluol*, etc., are to be written *benezene*, *toluene*, etc.)

Hydroxy- and not oxy- should be used in designating a hydroxyl compound; as *hydroxyacetic acid*, $\text{CH}_2(\text{OH})\text{CO}_2\text{H}$, (not *oxyacetic acid*).

As regards the endings *-in* and *-ine*, the latter should always be used for *basic* substances, and for them only; *-in* is used for *glycerides*, *glucosides*, *bitter principles*, *proteins*, etc.; thus *aniline*, *tyrosine*, *purine*, *morphine*; but *gelatin*, *palmitin*, *amygdalin*, *albumin*, *protein* (not *proteid*).

When a substituent is one of the groups NH_2 , NHR , NR_2 , NH , or NR , its name should end in *-ino*; thus $\text{NH}_2\text{CH}_2\text{CH}_2\text{CO}_2\text{H}$, β -*aminopropionic acid* (not *amidopropionic acid*); $\text{C}_6\text{H}_5\text{NHCH}_2\text{CH}_2\text{CO}_2\text{H}$, β -*anilinopropionic acid*; $\text{CH}_3\text{CH}_2\text{NH}_2\text{CO}_2\text{H}$, α -*aminopropionic acid*.

The term *ether* must not be used for compounds which are properly called *esters*. *Esters* and *metallic salts* should be designated in the form, *diethyl phthalate*, *methyl hydrogen succinate*, *sodium propionate*, etc. (not as the *diethyl ester of phthalic acid*, the *monomethyl ester of succinic acid*, or the *sodium salt of propionic acid*).

Acid radicals, such as $\text{C}_6\text{H}_5\text{CO}$, must have names ending in *-yl*, and their compounds with halogens, as $\text{C}_6\text{H}_5\text{COCl}$, are to be termed *chlorides*, *bromides*, etc. Thus, *benzoyl chloride* (not *chloride of benzoic acid* or *benzoic acid chloride*).

The connective *o* is to be used in such combining forms as *amino-*, *bromo-*, *chloro-*, *cyano-*, and *iodo-*; thus *bromobenzene*, *chloroacetic*, *nitroaniline*. A few exceptions to this rule are permitted on account of long established usage; as *acetamide*, *cyanamide*.

Substances containing the group SO_3H should, if possible, be called *sulfonic acids*; failing this, *sulfo compounds*; thus *phenylsulfonic acid*, $\text{C}_6\text{H}_5\text{SO}_3\text{H}$, and *sulfobenzoic acid*, $\text{HO}_2\text{CC}_6\text{H}_4\text{SO}_3\text{H}$.

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Salts of organic bases with hydrochloric acid should be called hydrochlorides (not hydrochlorates or chlorhydrates).

Salts of chloroplatinic acid are called chloroplatinates (not platinichlorides), and the formulas should be written in the form $(\text{CH}_3\text{NH}_2)_2\text{H}_2\text{PtCl}_6$. Salts of thiocyanic acid, HCNS, should be called thiocyanates. Use sodium thiosulfate for $\text{Na}_2\text{S}_2\text{O}_3$.

The word hydroxide should be used for a compound with OH, and hydrate for a compound with H_2O ; thus, chlorine hydrate, $\text{Cl}_2 \cdot 10\text{H}_2\text{O}$; barium hydroxide, $\text{Ba}(\text{OH})_2$.

Greek letters should be indicated by Gk. on the margin of the manuscript.

The following letters are italicized and should be underlined: *o*-, *m*-, *p*-, *d*-, and *l*-, for ortho, meta, para, dextro, and levo.

Use *dl*- (not *r*-) for racemic.

CHARTS.

Ink.—Charts should be drawn with black ink.¹ Blue-black ink and typewriting do not make good reproductions.

Paper.—Charts should be drawn on paper with a smooth surface. The cross-barred paper on page 437 is satisfactory for this purpose, as the blue lines do not reproduce. When it is desired to reproduce the finer lines, the blue lines may be inked in or the green-lined coordinate paper similar to the sample on page 11 may be used. The green lines reproduce and appear as black lines.

Reduction.—Charts should be drawn large enough to stand a reduction of one-half or one-third. The amount of reduction must be taken into consideration when the chart is drawn, and the lines must be heavy enough, and the letters large enough to make clear reproductions when reduced. Letters and numbers should, when reduced, be not less than 2 mm. in height. The outside measurements for charts when reduced, including the legend, are 4 x 6½ inches. Authors must determine whether the chart is to be printed the long or the short way on the page.

Margin.—A margin of at least half an inch should be left around the chart.

The sample charts show the original size of the chart and the chart reduced to fit the page of the *Journal*.

¹ Higgins' waterproof India ink.

DRAWINGS.

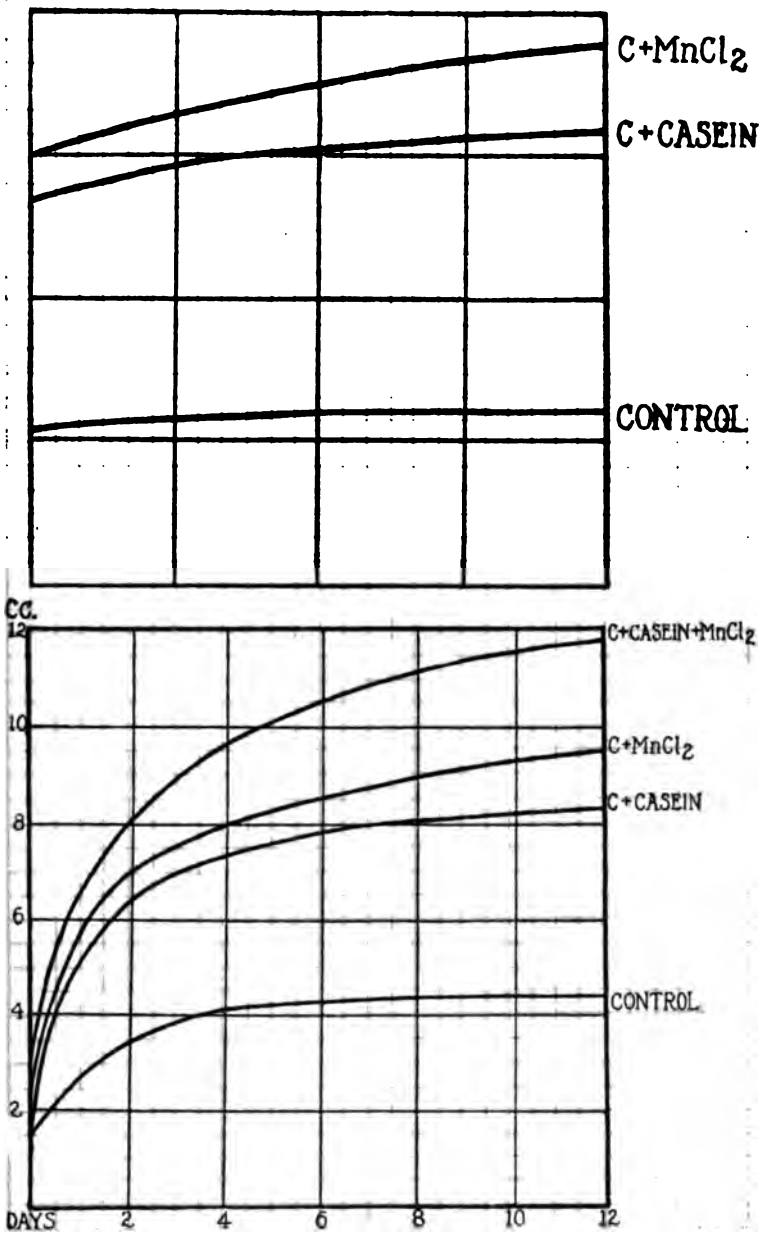
The above remarks concerning ink, pen, and paper apply also to drawings.

PHOTOGRAPHS

Photographs should be carefully treated. If two or more are to appear on the same page, they should be mounted together, and the size to which they are reduced must be considered.

Authors who have not the facilities for making their own as described above should send them unmounted. The part to be reproduced should be marked on the front or the back of the photograph, with an arrow. The top should always be indicated in some way, in doubt as to which way the figure should be placed.

Figures should be numbered consecutively. They should be referred to in the text.

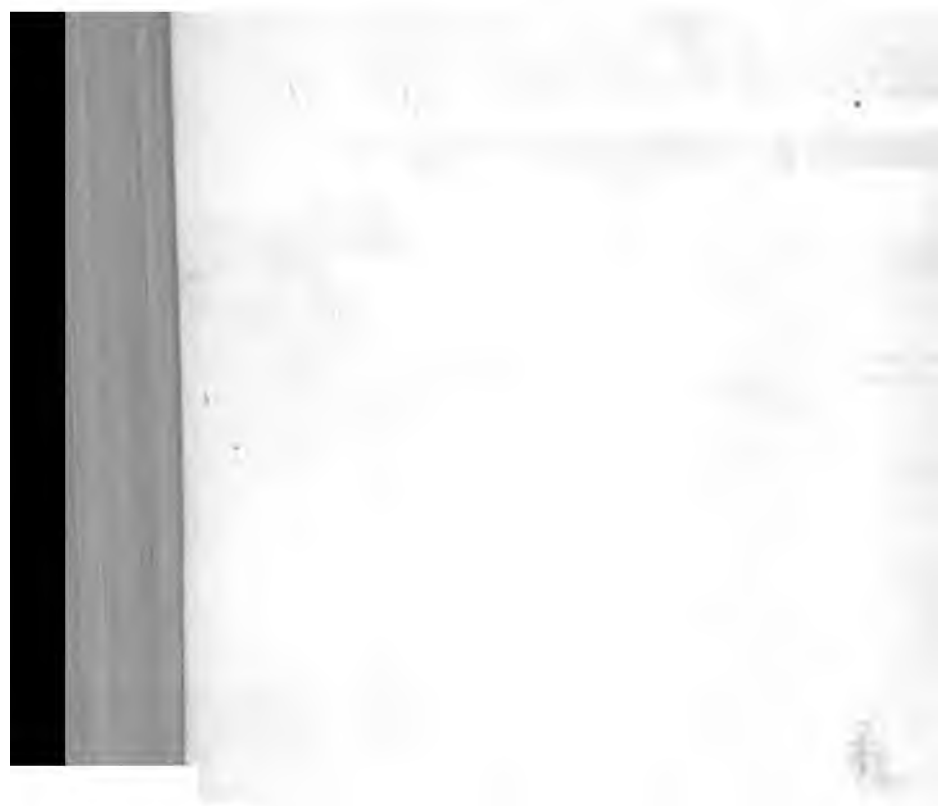


The lower chart shows the effect of reducing the upper chart to two-thirds of the original scale. The letters below are 2 mm. high.



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